Editorial Comment

Toilet Goods Association forms Scientific Section

For some time agitation has been rampant for the formation of a scientific section as a part of the Toilet Goods Association that it may emphasize the scientific aspects of the industry and broaden and expand the work of its Scientific Advisory Committee and the Board of Standards.

H. D. Goulden, director of the T.G.A. Board of Standards will act as the temporary head of this newly-formed Section until the first regular scheduled meeting which will be held in conjunction with the 1944 T.G.A. Convention, at which time officers will be elected.

Individuals who are connected with either active or associate members of the T.G.A. may become members.

Scientific work has been a major activity of the Association for some time, with such problems as developing a set of standards for cosmetic raw materials as well as considerable work on war-time raw material substitutes under consideration.

Under the able direction of the T.G.A. staff this Section should prove in these difficult times of invaluable assistance to its members.

U. S. dumping of brand items after the war feared

Disposal by the Government at the war's end of a tremendous amount of branded merchandise is feared by dealers and manufacturers alike. The Government, according to Fred Griffiths, speaking before the National Association of Chain Drug Stores "Victory Business Conference" held recently in New York, has purchased enormous amounts of branded merchandise at considerably lower prices than is charged through the usual civilian channels. This is a direct menace not only to the retailer, but to the manufacturer and wholesaler as well.

Should the war end and the Government find itself with an overloaded supply of this branded merchandise, there would be a very definite chance of such merchandise finding its way into gyp dealer hands, with the subsequent flooding of the market at below regular selling prices.

This problem could be minimized to a great extent, Mr. Griffiths said, if the Government would permit buying in bulk of unbranded items or branded items in special packages.

the American Perfumer and ESSENTIAL OIL REVIEW

COSMETICS · SOAPS · FLAVORS

EST. 1906

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desiderata

Comment on interesting new chemical developments and their application to cosmetics and toiletries.

by MAISON G. DENAVARRE

Maison G. DeNavarre, technical editor

ANOTHER EMULSIFIER

A product intended to replace glyceryl monostearate has just been made available. It is claimed to be more stable than glyceryl monostearate, but it is not self-emulsifying. A self-emulsifying grade can be supplied if so desired. No special tricks in using it; just replace glyceryl monostearate with it, nothing more. Product is a white solid material, with faint, pleasant and characteristic odor.

STEEL SHOP TABLES

One company offers a line of steel shop tables, assembled or not, made of 3/16 inch metal. The legs are ⅛ inch channel steel. They can be drilled or bolted together to make larger units. Sizes of tables are 26.75 inches by 37 inches with a 36 inch height. No priority required. The tables are priced at $8.40 already set-up, or $4.65 unassembled.

GLASS CONTAINERS

Unless some salvage campaign for jars and bottles gets under way soon, manufacturers will begin to feel the pinch of lack of containers. For it now looks like the 65 per cent quota will continue for an indefinite period, at least through the end of this year. There is a gawdawful lot of glass that can be salvaged in any town in the country. But it presents the same problem that all salvage programs pose; namely, manpower. Something might be worked out as it was in the case of tubes—bring a bottle and cap to get a new one. Then the assembling of used or salvaged containers poses another problem. But it can be worked out. It will have to be worked out.

DEODORIZING ISOPROPYL ALCOHOL

My paragraph in the last issue on this subject stirred up a hornet's nest. Letters have been coming in from one and all. Apparently, the stunt of using a deodorizing carbon is quite new to many. It is in fact, old stuff in a lot of industrial operations. The idea is to get the right carbon to begin with. Then use it at the ratio of about ½ to 1 per cent of the total. The isopropyl alcohol should be warmed up, preferably—but not over an open flame—then add the carbon, stir 15 minutes to a half hour. Add your other perfume ingredients, water, etc., then filter the whole thing in one operation.

We find that it is better to deodorize the alcohol just prior to use, otherwise it seems to revert somewhat to the old odor. We also find, that by diluting it with water, we seem to do a better job of deodorizing. In addition, the clever use of aromatic "blenders" and the correct perfume will complete the task.

Deodorizing is more complete at higher temperature than at lower temperature. Water tends to prevent the deodorized alcohol from reverting to the old odor. Don't build a stock of deodorized alcohol far in advance of use. Deodorize along as needed. Deodorizing carbon is supplied by a couple of companies. The AMERICAN PERFUMER will gladly give you the names of the people if you don't know them.

ICE RESISTANT GLUE

Automatic labelling equipment can use a new glue on labels of bottles that are immersed in ice or ice cold water without the label loosening or coming off. Tests indicate the bottle so labelled will resist loosening even if immersed in ice water for a week. Warm water removes it easily.

BRUSHLESS CREAM AND FDO-42

It is admitted that anyone who writes a restrictive order of any kind has a dickens of a job to do. No matter how it is written, someone is going to squawk. It is also generally agreed that most of the orders have been pretty well handled. Some have been considerably relaxed as a result of a better supply condition.

In FDO-42, brushless shaving cream is considered a *Soap*. (If everyone would only agree on that!) It is undoubtedly considered a soap only because lather cream is a soap; that is, it is only *fair* to the lather cream makers (who need low titer fats) to penalize the brushless cream makers who don't use low titer fats. It just made sense to put both lather and brushless shaving cream in the same boat. But the fact of the matter is, they are not really in the same boat. Brushless cream makers don't need scarce low titer fats such as coconut fatty acids or oleic acid. They can make a good

WE WOULD LIKE TO OFFER YOU ALL THE TUBES YOU NEED!

Sheffalloy TRADE MARK REGISTERED TUBES

SHEFFIELD PROCESS

BUT . . our fighting forces obviously have first call these days on ever increasing quantities of tougher New England SHEFFALLOY Tubes. Filled with essential pharmaceutical and medicinal ointments, they're going all over the world . . giving dependable protection under the most severe conditions. Briefly, that's why deliveries are sometimes delayed for our good customers whose orders are not rated or carry low priorities. The greatest possible contribution to VICTORY which we can make is little enough indeed . . we're sure our customers understand.

NEW ENGLAND COLLAPSIBLE TUBE COMPANY

3132 SO. CANAL STREET, CHICAGO • NEW LONDON, CONN. • W. K. SHEFFIELD, 500 FIFTH AVENUE, NEW YORK
THE WILCO COMPANY, 6800 McKINLEY AVENUE, LOS ANGELES, CAL.

product from ordinary stearic acid, which is comparatively in more pleatiful supply.

Why then penalize the brushless cream makers? Perhaps it is not wise in the present state of oil and fat affairs to let them go ahead without some control. They could at least be allowed to make what they made in 1941, or better yet, 1942. This would obviate a lot of form reading and checking the many exemptions, and most of all, it would prevent hoarding on the part of the consumer. For if the consumer couldn't buy lather cream, he could be sure of getting brushless cream. As it is, he isn't sure of anything, and so he protects himself by over-buying on both.

In fact, there need not be any restrictions on the manufacture of brushless shaving cream, because there are already restrictions on the purchase of glass—let alone the near impossibility of getting caps. Anyway it seems like a double stab.

LOW PRICE GLYCOL STEARATE

If any of the readers of this column are interested in buying a job lot of a glycol stearate, they will be glad to know that some can be had at a considerable discount over the market price. Several thousand pounds are available. Sample will be supplied. Write me at the AMERICAN PERFUMER if you are interested. The material is self-emulsifying, of good quality and in original containers.

HORMONE CREAMS

It is now possible to buy hormones for use in the manufacture of hormone creams. The hormone is dissolved in oil by the supplier, and shipped as an oil solution containing 10,000,000 International Units per liter of oil. This is the genuine estrogenic hormone. CAUTION: Hormone creams are drug-cosmetics and accordingly must be correctly labelled. They are not new drugs since they have been on the market for a number of years. However, they *may be* new drugs by virtue of new or novel composition. Be sure and be safe.

ARTIFICIAL FLAVOR OILS

The artificial flavor oils suitable for use in foods are amazing for their ability to produce the flavor in question. With citrous oils going through a "tight" period, some of the substitutes look awfully good, and as a result the prospects for the producer of the real thing look shaky under the circumstances. I've seen anise, cinnamon, orange, lemon, nutmeg, mace and cardamom. This war is making us find out a lot of things we didn't know we could do before.

Questions and Answers

465 LIQUID DENTIFRICE FORMULA

Q.: A supplier of methyl cellulose suggested we write to you regarding the formulation of a liquid dentifrice. In passing along this information please also suggest a wetting agent and a source of supply.

B. W. S.—MISSISSIPPI.

A.: There is a patent on the use of methyl cellulose in dentifrice. You had better check this point first before going ahead with it. Assuming no patent exists, you can use from one to two per cent of a medium viscosity methyl cellulose as a vehicle, together with up to 25 per cent alcohol, some five or ten per cent of glycerin or glycol—or even more if you desire—say 0.1 per cent saccharin, flavor, wetting agent and color. Few wetting agents are available for use in dentifrice, especially for new customers. We know of none at the moment. You might write to the various suppliers listed in the Wetting Agents Bulletin recently published by the AMERICAN PERFUMER.

466 MAKE-UP DATA

Q.: May we have data on the following: 1. formula for the new type cold wave, 2. water soluble hair cream similar to Wella and Savolite, 3. formula for pancake make-up?

M. G.—SOUTH DAKOTA.

A.: You request considerably more information than we are in a position to offer. We are going to make some suggestions, but should you require complete workable formulas, we suggest that you retain a consulting chemist. In any event, you should have a copy of some authoritative book such as "The Chemistry & Manufacture of Cosmetics" by deNavarre. Even so, we cannot attempt to advise you how to duplicate a well-known brand of product, even if we know the composition. It is not fair to such manufacturers.

However, here are our suggestions: The cold wave is accomplished by means of a solution of some reducing agent, such as ammonium hydrosulfide (which the FDA has condemned) or sodium thiogylcollate. The pH of such solutions usually does not exceed 9.0; after the solution has peformed its action, the reduction is arrested by means of some oxidizing agent, such as an acid solution of hydrogen peroxide. The hair is washed and set. A hair cream can be made from a polyalcohol stearate to which can be added a conditioning agent, such as a higher alcohol, mineral oil, lanolin or vegetable oil. Cake make-up is the subject of letters patent. The name is likewise trademarked. However, one company is known to be supplying cake make-up under private label. Their name goes under separate cover.

467 SACHET POWDER BASE

Q.: Since we cannot get alcohol for perfumery purposes, we are interested in a good base for sachet powder . . . an American source base, please. We have found a particular material suitable, but cannot get the supplier to reply to our letters. Thanks for your answer in the enclosed stamped self-addressed envelope.

R. J.—LOUISIANA.

A.: Rather than use the material you mentioned, we suggest you try wood flour which is available in several mesh sizes. Some scented woods such as cedar are also available. The supplier's name goes to you in your stamped envelope.

468 ISOPROPYL ALCOHOL DEODORANT

Q.: The last issue of the AMERICAN PERFUMER *has a paragraph on deodorizing isopropyl alcohol. Give us the name of the supplier of the carbon used. We have tried modifiers, but so far, they are far from satisfactory. We are interested in your opinion.*

V. S.—INDIANA.

A.: There is a supplier of a more highly deodorized grade of isopropyl alcohol; his name together with the name of the supplier of deodorizing carbons goes to you under separate cover. In the October AMERICAN PERFUMER, there is an article in the "Desiderata" page, on how this deodorizing is best accomplished. Deodorize as you need the alcohol. Use a modifier that has been carefully selected (there are a number of good ones available). Add ½ to one per cent deodorizing carbon, warm up but not on open flame, stir for 15 minutes at least, add all of your other ingredients and then filter.

CORRECTION TO QUESTION NO. 461 IN SEPTEMBER ISSUE

Inadvertently beeswax was left out of the second sentence in our reply. It should have read as follows: ". . . The best materials for producing cold cream are mineral oil of light viscosity, beeswax, ceresin, borax and water." Thanks to R. F. Revson for calling our attention to it.

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Outlook Bright for Post-War Cosmetic Industry

The ingenuity of the cosmetic industry has shown that it can meet the problems of the war period . . . We are not perturbed about its meeting those of the Post War.

by HILDEGARDE FILLMORE and ARTHUR HIROSE
respectively, Style and Beauty Editor, McCall's Magazine, and Director of Market Research and Promotion, McCall Corporation

MOST CURRENT pictures of the post-war world are painted in bold strokes and employ the most roseate hues. We hope these optimistic word painters prove to be right in their predictions. Yet candor compels pointing out that at the present stage of the war, there are certain phases of the post-war picture still surrounded by some formidable question marks.

For instance, consider the economy we'll be living under and doing business in when the war is over. It will differ from our pre-war economy, but we can't now predict its characteristics with any degree of certainty. No one, at this time, can tell us what sort of government we'll be operating under in the post-war era. There's the matter of business incentives versus government control, bureaus and bureaucrats. How aggressive will government bureaus be? How much will they slow down the normal *entrepreneur* instincts of the perfume and cosmetic manufacturer and his distributors?

Allied with the problem of post-war Government and governmental controls is another set of as yet unresolved questions: "Will consumers have a great deal or a little money when the war is over? Will reconversion to peace-time pursuits take a long or a short time? If it takes a long time, what will happen to our customers' savings? Will this money be dissipated in normal living expenses for such necessities as food, clothing and rent, while wage earners wait for re-employment? Will our national employment and national income slip back to their pre-war levels or be maintained at today's high levels?"

Hildegarde Fillmore

Arthur Hirose

This much is certain: if general conditions in the post-war era are favorable, there will be a greatly enlarged market for cosmetics, perfumes and allied products. The causes of this expanded market are numerous and worth examining, at least briefly.

COMPETITION FOR HUSBANDS

For one thing, in the post-war world there will be fewer men and more women. The casualties of war are still chiefly men, despite such new refinements of warfare like bombing of civilians which this war has introduced. With fewer men in our population after the war, the holy bonds of matrimony will be more difficult to achieve by women in the post-war world than was possible in pre-war or even war days. Women who want to get—and hold—their men will therefore be eager to buy and use all the artifices of the perfumer and the cosmetic seller.

Even before the creation of an armed force of ten million, men in America were getting scarce. The 2,800,000 male majority which we had in 1910, was being whittled away at the rate of 100,000 a year, according to the Census Bureau. So that even without the war and resulting male casualties, women were scheduled to outnumber men.

NEW EMERGENCE OF WOMEN

Another strictly war-born phenomenon that will help post-war cosmetic sales has been the greater emergence of women. Women as a result of the war are more in the public eye and are likely to remain in this position. Women have come out of the seclusion of homes to go into industry and business. Since July, 1940, the number of women at work has increased by more than 5,000,000.

Also, women have come out of the seclusion of homes into the public eye via the WACS, the WAVES and the SPARS.

This new emergence of women has already had far reaching effects on the use and sale of cosmetics, perfumes and allied products. It will have further repercussions after the war. The woman or girl who used to spend most of her time in the home didn't feel the same necessity to look her prettiest that she feels when she goes into business, a war plant or into the WACS or WAVES.

Likewise, women in their emergence into the public eye, have in many cases come from rural districts or small towns where the use of cosmetics may not have been as general as it is in the cities and camps where these women land in their war effort. Some of these women had never before bought cosmetics and perfume. Others, with more money in their slacks, uniforms or

pocketbooks, are able to buy a larger variety of cosmetics and to buy more expensive brands. This "sampling" process is one of the industry's greatest hopes for an enlarged post-war market. Just think of the women who, until the war, had never bought dusting powder, cologne, fresheners or deodorants.

In the post-war world there will be fewer jobs for the women who want them. That great womanpower shortage will evaporate, and a girl will have to be both competent and attractively groomed to find and keep her job.

What will happen to women after the war? Will they go back gladly to homes and humdrum pursuits or will they stay in industry and business? Experts differ but generally agree that not all the women will return to their homes when the war is over. Some, for economic reasons, will have to keep on working. Others will prefer factory, office or store work and will stay on of their own volition. But in any case there is an added increment to the cosmetic industry's customers in the women who've been introduced to cosmetics as a result of the war.

What about the theory, sometimes advanced, that the war is making women, at least in their outward appearance, less feminine? Don't be fooled by those slacks, overalls and uniforms. Instead remember the gals you've seen in slacks, topped by a frilly blouse. Or recall the WACS and WAVES looking with nostalgia into the shop windows at all the new finery for their civilian sisters.

Undeniably women, due to the war, have attained a new freedom and with it have widened the range of their activities. These activities embrace not only work in war plants, the WACS and WAVES, Red Cross, Civilian Defense jobs, etc., but also victory gardening, household repairs and many of the peace-time pursuits of their men folks. Women are using their brains, their hands, their skills, as never before. Possibly there are implications in this new emergence of woman for the cosmetic industry.

INTANGIBLES AFFECTING MARKET

Intangibles affecting the post-war market for cosmetics offer fields for intriguing speculation. There are those of us who believe that as the result of the war there will be almost no menial class in the post-war period, since domestic servants will prefer the higher wages and greater freedom of factory life. Without servants, women will have to do their own housework. Will the fear of red rough hands promote a larger sale of hand creams and lotions?

An intangible to speculate upon in the prospect of greater leisure for women is based on snorter working hours in the post-war world's factories, stores and offices, on the one hand, with wider distribution of household labor-saving appliances, on the other hand. What effect will increased leisure have on women in relation to cosmetics? Will it increase the market for beauty aids associated with sports like swimming, tennis, bowling, bicycling, skiing, etc.? Will we have a race of perpetually tanned, healthy outdoor young women? How will any new leisure promote more business for beauty shops in contrast to home use of cosmetics?

These are just a few of the intangibles that may affect the cosmetic and perfume industry and are worth thinking about.

POST-WAR DISTRIBUTION

What are the probable changes in the post-war period that will affect distribution of beauty preparations? Two major influences will doubtlessly be at work. One is a greater decentralization of population after the war, that will hold for both factories and homes. The growth of the large cities will probably slow down or stop. Newer, smaller communities will be fostered. The second and contributing influence will be improvement in transportation. Leave out, if you choose, the effect of greater airplane travel. But the influence of improved and speedier railroad and bus transportation can't be discounted. Add to it the new and enlarged system of highways and the new economical automobiles that are inevitable after the war and changes in the distribution picture for beauty preparations are probable.

One effect of more greatly decentralized population should be an increase in the number of retail outlets for convenience and "demand" items like soaps, face powder, dentifrices, etc. More local shopping centers with their drug and syndicate stores seem indicated. Yet there also seems to be no reason to expect that city department stores with their multitude of lines of perfumes and cosmetics, aided by improved transportation, will not continue to have their place in the picture.

CONSUMER INCOME AND PRICES

What about consumer income, by classes, and its relation to the cosmetic industry after the war? Wars, generally speaking, have a habit of contracting the ranks of the rich and moving millions of the lowest income families into the pre-war middle income classes. After this war, the great and expanded middle class will probably be the big market for cosmetics and perfumes.

Don't jump hastily, though, to the conclusion that all cosmetics, or most of them, will be medium-priced in the post-war market. Women have always appreciated the luxury items in perfume and cosmetics. Millions of them, through the war, have had an opportunity to sample higher-priced items than they customarily bought before the war.

Prices may well be higher after the war than before the war. The general tendency of labor will be to fight to hold its war-won gains in higher wages. Added labor costs will mean added material costs in many industries and will probably have the tendency to hold prices of cosmetics at their pre-war levels or above them.

SALES AND ADVERTISING APPEALS

Distribution, selling and advertising have always had a close kinship. What about selling and advertising of beauty preparations in the post-war period? No one in his right mind would expect to see perfumes and lipsticks sold and advertised in the post-war days on the same basis as canned vegetables or bed sheets. Grade labelling, specifications, thread count, tensile strength—this type of thinking seems completely alien to the cosmetic business.

And yet we'll find the consumer, in the post-war era, a better informed and a wiser buyer. As a result of the war, with its scarcities, substitutions and alternate products, consumers know the assets and liabilities of merchandise better than before the war. This new knowledge—this new awareness—must of necessity have its effect on post-war selling and advertising.

The old appeals to human nature which were so effective in the past in the selling and advertising of beauty preparations will still be powerful, but consumers will not resent being given more information in selling and advertising than they have been given in the past. This post-war desire for informative selling and advertising should be a good thing for both buyer and seller.

PRODUCTS AND PACKAGING

What products will sell in the post-war market for cosmetics and perfumes?

The answer to this very important question is two-fold. Manufacturers themselves have the knowledge and the ingenuity to bring out new and better products. It would be presumptuous for two outsiders to make recommendations on this score. On the other hand, the job of people working on magazines having a total circulation to over 6,000,000 women, as "McCall's" and "Redbook" magazines have, is to keep in touch with the wants and desires of women.

Here then, product by product, are some speculations on what women may be expected to want, not only in products but also in their packaging:

PERFUMES, COLOGNES, ETC.

Will there be a market for the so-called "cream colognes" after the war? Do they have advantages which will make women want them when the original alcoholic product is again available? Toilet water and cologne, too, have been used as substitutes for perfume by American women. Will they continue to be used this way? Women have enjoyed the lavishness of using toilet waters and colognes freely, for both scent and that zippy feeling that a well-blended cologne gives. The "zip" quality is lost in the "cream cologne" and the fragrance is often short lived. So the prospects for restoring the prestige of fine colognes seems good. As for fine perfumes, the economic situation will be important there, for money spent now for expensive essences won't necessarily be so free-flowing after the war. There will certainly be a market for atomizers, for these will wear out and grow shabby during the war years. Design in atomizers can be planned to fit in with post-war decorative campaigns, from the traditional to the modern.

Another signpost that points to expanded sales is the fact that, according to reports on 50 years of weather in this country, we are in a climate that is slowly getting warmer. If the weather observers are right, all products intended to combat the effect of heat and perspiration should be in an upward trend. That would include toilet waters, colognes, cooling bath preparations and such.

FACE CREAMS

Before war-time restrictions were felt a real market had grown up for creams with so-called "biological" ingredients: hormones, vitamins, etc. Much experimentation and talk about these creams, or cream-like preparations, has gone on behind the closed doors of industry laboratories. Will more women want them when they appear on the market after the war? Will American women retain their youth-complex in the competitive post-war world? It seems likely.

Cosmetic manufacturers who look forward to the time when they can launch a new product of this type should remember that *one cream* that gets a bad name can damage the market for *all* such preparations for years to come. Women have watched the developments of sulfa drugs, penicillin, and other miracle-working discoveries. It shouldn't be hard to convince them that modern science has found certain compounds which retard wrinkles.

Progress has been made in improving the more conventional type of cold cream, cleansing cream and softening cream. If a manufacturer has feared to change a popular formula, but is convinced he has a better cream, he will have his chance to put over the improved product in the post-war era. Women will definitely be looking for "something new." At the same time, makers of so-called "treatment lines" might study their price range to be sure that it fits the pocketbooks of their post-war customers. If there is economic depression, constructive changes in prices and sizes of containers are indicated. Women do not buy creams because of a pretty bow on a jar. They buy them because a cream is supposed to improve one's skin texture. It's a product that must perform.

What about the girls who never got "treatment" habit during war-time years? Will they automatically become customers for more than one all-purpose cream? With the right education this group may provide a new market. Without propaganda, however, they will be tempted to spend their money on many other beauty products put before them on cosmetic counters. All surveys show that there is a considerable group of women in the appropriate age and income brackets who should use face creams but have never done so. In planning post-war campaigns the realistic cream manufacturer should face this fact and act upon it.

FACE POWDER

Women have few complaints about face powder, so the demand would probably go right on. But many women have complained about the inconvenience of many face powder boxes. Except for a few refinements in decoration and construction, face powder boxes are about the same as they were when face powder was first introduced, many years ago. Only a small percentage are designed to fit the everyday habits of women who use face powder from a dressing table drawer or a bathroom shelf. Old fashioned boxes with tight lids are impractical; most women throw away the lid, keep a puff on top of the powder. This isn't very sanitary, and leads to spilling of powder. Boxes with hinged tops and some protective methods of keeping powder from spilling are much more efficient. But they represent only a small percentage of boxes on the market today.

As for powder puffs—you can't use powder without them, but comparatively little creative genius has been expended in solving this problem.

There's a big market waiting for the inventor who can devise a new kind of powder puff. It might be made from one of the marvelous new synthetic fibers. It should be a puff that acts like swan's down, but is cheap enough to throw away after becoming soiled.

LIPSTICK

The war has had at least one wholesome influence: it has swept out of our ken these days those weird shades of lipstick that used to delight the promotion managers and publicity gals, but often caused revulsion in the mind of the husband or boyfriend.

Nowadays we have discovered that red has a dozen nuances, but it's still red, and it's a natural accent. Perhaps, with the style upheaval that is sure to come at the war's end, the makers of lipstick will decide that it is again time to exchange sheer flattery for the purely exotic. It is to be hoped, however, that they will bend their energies to the creation of smarter, more efficient lipstick cases, instead of dreaming up unnatural colors. With the future development of plastics or other synthetic materials there is no limit to the ingenuity which can be displayed.

LEG MAKE-UP

This past summer's record has proved that, in spite of improvements in cosmetic stockings, the product does not seem to have the acceptance and repeat business which was expected from it. It has been found that, in general, girls consider that it's just too much trouble. It takes too much time to put it on, and to remove it. These, alas, are days when nobody has extra time.

SHAMPOOS AND HAIR PREPARATIONS

Will the sale of shampoos be extended after the war? Or will women now deprived of the services of a beauty shop want to go back to a hairdresser? The argument in favor of an expansion of home shampoo sales lies in the fact that most younger girls have mastered the art of washing and arranging their hair by their own skill. They may hanker after beauty shop services, but, again, they may not want to spend that money on something they can do without. Much depends on style trends in hair-dos. Such trends can, also, bring into the picture new hair lacquers, setting lotions, rinses or dyes.

DEODORANTS, ANTI-PERSPIRANTS

Makers of these products, with the aid of their advertising, have done such a good job of selling the younger generation that we can look forward confidently to a wider use of these preparations after the war. The market is wide open for improved products, either better formulas or better packaging. Market research shows that inferior products cannot ride in on the success of really good preparations.

RECOMMENDATIONS

The big intangible, uncertain quantity in all discussion of women and their changing tastes after the war is, of course, that unpredictable force we call STYLE. We all know what the words "Paris" and "France" meant in the style business before the war. To American girls growing up in this period, who were from fourteen to eighteen when France fell, what can we give that will present the same luxury appeal we got from abroad? During these years we have been watching the style scene shift. Inspiration to American girls can come from Hollywood, from New York, or from the smartest store nearby, whether it be Dallas, Minneapolis, or Podunk! Taste, too, has shifted and we find women with new money to spend looking for "the most expensive" perfume (or dress, or hat) without much regard to either smartness or appropriateness.

It is all very well to say that the basic appeals don't change. But the way we dress up these appeals does change, and we are all going to fare better if we keep our eyes and ears open and our minds alert to these changes.

No one can deny that Americans are becoming more world-minded. This, combined with a growing desire to know more about their own country, will influence style trends. There is romance galore in Mexico, South and Central America. There are plenty of style sources in our colorful Southwest. The influence of China is being felt already, as are certain native decorative trends long associated with the East Indies. Hollywood, more than any other center, has fixed certain American habits: suntan, lavish use of lipstick in the movie-star fashion, wide-shouldered frocks, eye make-up, long, flowing bobs, and California's play clothes are a well-defined part of the seasonal fashion picture.

Possibilities of '46 Cosmetic Trade

THE YEAR 1946, anticipated as the first normal year after the war's end, will bring a 36 per cent increase over 1940 in cosmetic sales, it is estimated by L. A. Barber, of the Drugs and Pharmaceuticals Unit of the Bureau of Foreign and Domestic Commerce.

The ready release of raw materials under present allocation will enable manufacturers to revert to normal or increased production due to the increased demand occasioned by the many women in industry who have become cosmetic conscious — who formerly were never cosmetic users. This consciousness will as a habit obtain after the war whether or not they remain in industry.

The cosmetic situation is in a somewhat different position than many, in that it will have less readjustment to make when the men returning from the front come seeking jobs. The cosmetic industry has always been manned by women and these women will be retained in the same positions.

Government projects in construction, road building, housing, etc., will all indirectly react favorably for the cosmetic industry in that the producer of essentials will have more surplus money to spend and a considerable amount of this will be directed to the cosmetic industry.

"Aside from domestic reconstruction there will be the gigantic task of giving relief and rehabilitation to liberated areas of Africa, Europe and Asia. This project will necessitate the manufacture of great quantities of clothes, and countless other necessities for shipment to these areas. While the people being helped by us will probably be unable to buy our cosmetics, our domestic market will benefit indirectly —large numbers of people employed will be able to spend money on cosmetics," states Mr. Barber.

Our greater post-war requirements for essential oils, gums, etc., originating in foreign countries, will be met upon resumption of uninterrupted ocean steamship service. Any delay in receipts of foreign floral oils from France and other countries will not deter our output as manufacturers have become expert in blending florals with synthetics.

The war has proven that packages are not the prime consideration in purchasing cosmetics; it is the product itself. So with decorative packages again available plus good products the opening hypothesis, a sales volume in 1946 representing an increase of 36 per cent over 1940, should be attainable.

Survey of Rural and Urban Markets Shows Uptrend

The rural market which has been developed as a source of considerable increased business for wholesale drug and grocery stores will undoubtedly prove a potential post-war outlet

SMALL-TOWN and rural areas of the United States account for an average 20 per cent business increase, according to the latest retail trade survey made under the direction of the Western Newspaper Union, of which over 94 per cent of 2,722 wholesale drug and grocery dealers questioned reported during the last twelve months. Various estimates of increase in business with small town merchants ranged from 10 to as high as 100 per cent.

The survey, national in scope, revealed also that over 71 per cent of the wholesalers reporting trace from 50 to 100 per cent of their business to stores in towns under 10,000 population. These thousands of communities, together with the farm population, comprise what is properly called "Rural America," and contain more than half the people of the United States.

Since gasoline and tire rationing went into effect, 85 per cent of the wholesalers reporting say no appreciable difference has been evidenced in their deliveries to small-town stores, although some have found it necessary to reduce the frequency somewhat.

Mileage rationing has brought many new customers to small-town stores, customers who at one time preferred to drive to larger shopping centers. This has been a main factor in effecting the addition of many new lines, such as toilet goods, drugs and novelties which the customers formerly purchased in nearby cities. Also, nearly 82 per cent of the wholesalers reported that the average small-town store has added new lines to make up for unobtainable merchandise.

ALLOTTING OF ORDERS

Many firms dealing in toilet goods are allotting their orders according to the percentage purchased in previous years when supplies were plentiful. This applies to rural as well as to urban customers. This goodwill policy will probably reap dividends in post-war days, as the demand for these products in rural areas will be well established.

A second factor—other than that farmers and townspeople are obliged to buy more at home—is that Rural America has developed a tremendous buying power. This rural fat purse is due primarily to the huge income from farm products as well as to the activities of the thousands of medium size or small factories where foods are processed or packed or where war goods are turned out under sub-contract.

A question that naturally occurs in any discussion of present-day prosperity in Rural America, is—"How long will it last?" On this point, Earl E. Sproul, vice-president of Western Newspaper Union, says: "The duration of the war is uncertain. The post-war period of readjustment will be long-drawn-out. These rural communities will still be the heart of food production and processing, which are basic in peace as well as in war time."

It is expected that the great demand and heavy buying power of Rural America for all types of goods will continue into post-war days. The buying habits of small communities have changed considerably since the outbreak of the war, and with increased incomes there are many products in demand now in rural stores for which there was practically no demand a few years ago.

Merchants in Rural America have always been good merchants. They had to be of necessity. The difficult years have made them all the shrewder with the result that America's small-town areas appear to be in for a period of prosperity; a period of such duration that it behooves anyone looking for present and future markets for his products to consider carefully.

Not only are the rural sales increasing steadily, but the month of October should show the highest dollar total of sales and services in medium and large-sized cities for any month in 1943 to date, with the total of $6,140,000,000 being approximately five per cent higher than September and 8.8 per cent higher than October of last year.

With few exceptions, all cities in the United States are doing more business than they were a year ago. The 15 leading cities showing the greatest percentage increase over last year are: San Diego, Austin, Savannah, Wichita, Ogden, Honolulu, Oakland, Evansville, Topeka, Portland, Me.; Kansas City, Kan.; Long Beach, Phoenix, Tacoma, and Akron.

Wholesalers' Comments

Typical remarks of a number of wholesalers who were asked to comment on the conditions of rural business today are summarized below:

SOUTH: Small-town stores are showing a notable increase in business . . . there is a definite change in the type of items sold due to demand that smaller stores now supply consumers with merchandise once obtained from larger shopping centers.

SOUTH WEST: Merchants in rural areas have shown an increase in the past year . . . the decrease in number of stores has been caused mainly through lack of suitable help and the drafting of proprietors . . . in some sections new stores have opened because of gas rationing.

EAST: Small-town stores are free buyers of new items which show merit . . . druggists report steady gains . . . number of stores decrease because proprietors are drafted.

MID-WEST: Small-town and cross-roads stores are booming. In many cases wholesale deliveries are made now every two weeks instead of weekly . . . there has been a small loss due to difficulty in getting goods, not entirely offset by new lines, higher prices, etc.

WEST: The average store has added new items and lines to replace rationed items . . . up to present date, country merchants have had complete stocks . . . increase in business is due to farmers who buy from small-town merchants.

THE WAR PARADE OF ESSENTIAL OILS AND AROMATICS

As Compiled From Authoritative Market Sources

The *Sixth* of a series—

Progress of the war promises opening of certain foreign sources—shipping space limitations severe—imports probably will be controlled—what an early peace may disclose in European areas. This concludes current series.

Harland J. Wright
Publisher

DESPITE a few isolated helpful developments, the manufacturers of finished goods in the United States were reduced to a narrow choice of essential oils, the imports from South America and West Indies being further limited by lack of shipping space. Had the conditions remained as critical as they were in the fall of 1942, our industries would have been forced, after exhaustion of existing essential oil stocks, to simplify their formulas so drastically that many a nationally wide distributed product would have lost its original character.

PROGRESS OF WAR GIVES HOPES

Fortunately, when conditions appeared almost hopeless, the problem of supplies assumed a more favorable aspect through a few far-reaching political events. The occupation by British forces of Madagascar and the adherence of the adjacent Comoro Islands and Reunion, brought under Allied control territories which for many years had been important raw material suppliers of the perfume, soap and flavor industries. Oil of ylang ylang, clove, the so-called "East Indian" lemongrass and vanilla beans became, at least theoretically, again available but the enormous distances and the ever increasing shortage of shipping space made delivery of these goods to the United States extremely difficult. Reunion Islands in the South Indian Ocean, producers of oil of geranium, vetiver, ylang ylang and vanilla beans, soon afterwards joined the Fighting French, and thereby the orbit of the Allied Nations. The occupation of North Africa by the United States is a further and promising step toward the alleviation of raw material shortages. Morocco before the war had developed into a producer of substantial quantities of thyme, origanum and pennyroyal oil. Algeria for many years had supplied the world market with high grade geranium oil. When French West Africa renounced its connections with Vichy France the potentially large production of Guinea sweet orange oil was again at the disposal of the Allies.

SHIPPING SPACE A BOTTLENECK

However, so far this latest favorable turn of events has remained without much practical significance since the military demands for shipping space have not as yet permitted importations of essential oils from the Madagascar area or North Africa. The silver lining in the clouds is definitely appearing as is evidenced by the fact that as we go to press this month it is rumored though not confirmed that a substantial shipment of vanilla beans is on the water bound for the United States. It is possible that some essential oils may be on the same boat, but it is not yet known. Arrangements are in process for resumption of trade in essential oils, but there remain certain complications among which are limitations governing shipping facilities. Oil of ylang ylang, geranium and vetiver belong to the perfumer's most important raw materials, without which it is extremely difficult to create really good perfumes or cosmetics. These oils are almost indispensable in overcoming the harsh notes of synthetics. They go a long way to offset the shortage of natural flavor oils at least in the medium-priced article. It is hoped that within a short time Madagascar oils may be again available to this market. There are economic problems now being clarified.

With respect to North Africa the recently created Office of Economic Warfare, operating under directives from the State Department, is organizing procedure which would permit controlled importations from North Africa. Since the military occupation

of North Africa, private business has been eliminated, giving military requirements maximum use of all facilities. Strategic materials only have been given shipping space from North Africa to the United States. We understand that very soon facilities will be provided by an agency under Office of Economic Warfare which will permit imports, subject to certain controls. Possibly a similar procedure will be followed as Sicily and Italy are brought under Allied control. The process, however, will be slow and undoubtedly a matter of many months will be consumed before tangible trade results are realized which would result in a flow of essential oils from these countries to America.

ACUTE SHORTAGE OF PEPPERMINT OIL

At home the past few months have seen developments in peppermint oil which have seriously disturbed the trade. Essential oil dealers have been operating under general maximum price regulations established April, 1942, of approximately $5.50 or $5.60 per pound as a ceiling. The plant production has been short. Instead of about 1,300,000 pounds, authorities place it at less than 800,000 pounds. Costs of production have risen due to shortage of manpower and other causes incident to the war and it has been impossible to buy peppermint oil from the producers at prices that will enable essential oil houses to resell at their ceiling. Consequently there is at the present time little peppermint oil in the market.

The Office of Price Administration has for months been in the process of placing a ceiling upon the farmer-producer which has been issued under date of September 27 placing a ceiling on the farmer-producer of $5.50 and raising the essential oil ceiling proportionately. The shortage became so serious that the Food Distribution Administration operating under the Agriculture Department issued an order freezing all peppermint stocks as of Monday, September 13, and called for reports to be made on stocks held throughout the country in excess of 25 pounds and filed by September 28. Shortly after data is in hand, Food Distribution Administration will allocate available supplies to various industries, including a quantity requested by the British Government on Lend-Lease. With a very short crop the situation is further confused by the demand for peppermint oil for the manufacture of menthol, which since the start of the war with Japan has become increasingly short in this country.

WHAT AN EARLY PEACE MAY DISCLOSE

Theoretically the situation in essential oils has improved and this may soon be so in fact, offering needed alleviation of the enormous difficulties with which our industries are confronted today but we are still cut off from the most important suppliers of raw materials in Europe and the Far East.

One can only speculate on what picture would be presented if the war should come to an early end—let us assume, first in Europe. There probably exists in some countries accumulated stocks of essential oils which would reach the American market as soon as shipping facilities permit. This seems to hold true especially of the countries which had been cut off from overseas for the last few years; for instance, Dalmatia with its oil of sage, Bulgaria with its rose, Sicily and Calabria with lemon, orange and bergamot, and Holland with caraway. We do not know how much the German perfume, soap and flavor industries have been curtailed during the war years. Reports have been heard that Germany kept on supplying all of occupied Europe but, on the other hand, recently the German industries have probably been mobilized for total war effort, eliminating all goods for civilian consumption. Many regions formerly producing vital essential oils are undoubtedly suffering from a serious shortage of vital food products. Part of the acreage formerly devoted to the growing of aromatic plants has quite likely been switched to the raising of food. Many regions have been drained of manpower.

We do not know how far the flower oil industry of Grasse in Southern France has been affected by the military occupation. It would not be surprising if much of the valuable metal equipment, particularly the copper stills and extractors, have been confiscated and converted into war implements. For about three years the process of enfleurage could no longer be carried out in the factories of Grasse for the simple reason that the necessary fat "crops" were no longer available, all the animal and vegetable fats being allocated to human consumption. Similar difficulties must exist in Grasse, it seems, in regard to volatile solvents which serve for flower extraction. These solvents used to be rectified, previous to the war, from high grade imported American gasoline, the Roumanian and Russian petroleum being much less suited for the purpose. Considering all these factors it seems quite plausible that years of reconstruction will be required before the Grasse region and other essential oil producing sections of Europe can again become as productive as in pre-war days.

Until this is accomplished, our industries will have to continue employing substitutes for many essential oils and natural flower oils. If total war, on the other hand, should last several more years, there is grave danger that the entire essential oil industry of Europe will undergo fundamental changes bordering on extermination. It is probably true that the growers of roses in Bulgaria, of jasmine, tuberoses and other flowers in Southern France will continue their small plantings to some extent but hunger is a factor more powerful than any other consideration.

Germany is driving, as far as we know, all occupied countries into mobilization for total war with little consideration for these industries. If the war should continue for some time, it will be long before our American industries of finished goods can again count on normal supplies of essential oils, condiments and aromatic plants. In the meantime, substitutes must play a role of ever increasing importance.

Short Adages

by R. O'MATTICK

IN THE January AMERICAN PERFUMER this column predicted that Italy would be out of the war before the winter was over. Well—the winter isn't over yet and Italy is out! Nothing is known at this writing as to how much damage has been done to the bergamot, lemon and orange regions around Reggio Calabria, San Giovanni, Melito and the other citrus districts. But it will be a long time before essential oils come from these parts. How long, this column hesitates to say despite our past success as a soothsayer. Frankly, we fear to spoil our past record. Make enough guesses and one of them, at least, is bound to be wrong. We dread the danger that even our kindest readers will forget the correct guesses we made and only remember the wrong ones. "The good is oft interred with their bones," as the Great Bard said.

* * *

Dr. Rowmateral never tires of talking about his former world travels. We do not mean travels in a former world but those he made in this one formerly—before the war. But he does not seem to like others talking about theirs. Perhaps he suspects a certain hidden mockery of his own global glissades when some one else is reciting a travelogue. Yet it isn't easy to hinder his friend Emile Noselle once he gets started. "On my last trip to Southeastern Europe in 1938," he began, "I discovered a small café just outside of Izmir where the merchants of styrax and I transacted business over some wine, Medoc 1907, and some remarkable Turkish pastry. But the finest coffee that I ever drank anywhere was with some Bulgarian Rose distillers in a traktir in Tirnovo. It was wonderful how they prepared it." "A veritable Cook's Tour," said the Doctor, dryly.

* * *

Keep your powder dry, girls! The utility bags issued to the WACS are actually and officially known as "portable powder rooms." We have seen many powder rooms in our day, yes, sir. But they were immense in size and with lots of machinery and mixers and sifters and whatnot. We mean, of course, the rooms where face powder and talc powder and dusting powder and foot powder are manufactured. And what large amounts of perfume oils and colors and magnesium carbonate and lots of other ingredients these machines eat up and mix and then emit into cans (when there were cans) and into other containers (when there were other containers). And these machines—the very best, are made by our good friends and advertisers, the machine folks, and the perfume oils and the colors and the talc and the whatnot are all made and packed and sold and shipped by our good friends and advertisers, the perfume oil and color and talc and whatnot folks. And soon they will all be in full swing again—when the war is fought and won—and they will come around to sell you this and that, etc.

* * *

We read somewhere that a chain of automobile-supply stores, having few tires to sell, will market toiletries. Hence, in a recent column of Short Adages we suggested that soon you might see a sign: "Have you changed your beauty oil today?" The Editor tells us that a dozen phone calls came to the Editorial Desk asking for the name of the chain of automobile supply stores. Unfortunately, we can't recall where we obtained the information or whether the name was even given. But we learned much from the incident. Most of our readers, we hope, enjoy the adventures of Dr. Rowmateral and admire the sayings of Pat Chouli and Otto Stock—not to mention our own "prose and poetry." Yet what makes them phone the Editor about us is the mere mention of a possible sales outlet. This shows that our readers, whatever their literary tastes, are all one when it comes to getting more business. And that is as it should be—business before pleasure. So while we have no thought to abandon our literary efforts which are for the benefit of those who, having already made a million dollars, wish to sit back in an easy chair and follow our whims, we plan to devote more space to such mercenary matters as more and better sales outlets—in other words to make our readers richer and richer so that they phone the Editor about us oftener and oftener. In that way we may in turn be able to get an increase in the currency of the realm with which to buy that estate in Maine which harbors two tennis courts, a private driveway and acres of pine trees.

* * *

Mr. Firm Offers, who has been doing a lot of thinking lately about the African situation, sends this contribution for our "Markete Reporte" department:

For buyers having "shortage fears"
Geranium stored in Algiers
May soon come in with lavandin—
But you still have time for your cheers.

The trade winds blow cold and blow hot—
The spot market's left out a lot;
You *will* get cloves in endless droves—
When the market is right on the spot.

In a time not so far away
You'll get cumin and caraway;
But meanwhile stint on your old peppermint
While you wait for that glorious day.

* * *

In other words, say we, the so-called spot market is an X-market—X marks the spot! We recall the days when it was all "afloat." Now it's all stored in Africa. It all sounds good but when do we get it? Our predictions are—any year now.

I only told my wife that we didn't consider cosmetics an essential industry!

Glycerin—A Valuable Accessory to the Perfume Industry

Glycerin in the manufacture of perfumes is an important ingredient possessing fixative and solvent properties . . . It is used to a considerable extent in perfuming leather

by GEORGIA LEFFINGWELL, PH.D.

AS pointed out by the perfume authority, Parry, glycerin is used to a considerable extent as an accessory to the perfume industry, and more recently, since Parry[1] made this statement, glycerin has found much wider application in connection with perfumes and related products. Hence a brief discussion of the uses of this versatile fluid as well as its chemical derivatives is in order.

A SOLVENT AND A VEHICLE

It is generally agreed that for perfumery purposes, only the very best grade of water-white practically odorless glycerin should be employed. Chemical purity is a prime consideration in this connection. Although many properties of glycerin are brought into play in this usage, one of the prime reasons for the employment of this fluid is its value as a solvent and vehicle. It is really a "holder" of odor or flavor as in a flavoring extract or a cigaret or a food.

Pertinent to this point is the observation of Gattefosse, as cited by Forrester[2], that, "it will be easy to aromatize products sufficiently by dissolving, for instance, from one-half to one gram of terpeneless essential oil or synthetic perfume in 10 grams of alcohol, and simply putting it into water, when it will completely dissolve. Besides, it is possible to increase this quantity of oil (one gram), by using a solvent composed of 10 grams glycerin and 20 grams absolute alcohol."

Glycerin's high boiling point is also frequently utilized in the formulation and manufacture of perfumes and perfumed items. Although glycerin cannot be considered as a fixative in the sense employed in perfumery, it does act, according to one informative source[3], to a certain extent as a fixing agent in that it tends to lessen the volatility of the perfumes.

Interesting instances of such usage are available in the technical literature.

Dr. Leffingwell looks at glycerin's future

Thus, glycerin is employed in making liquid perfumes as in the following Essence Bouquet:[3]

Extract of rose (2d)	64 oz.
Extract of jasmin (2d)	12 oz.
Extract of cassie (2d)	8 oz.
Tincture of orris (1:4)	64 oz.
Oil of bergamot	½ oz.
Oil of cloves	1 dr.
Oil of ylang-ylang	½ dr.
Tincture of benzoin (1:8)	2 oz.
Glycerin	4 oz.

Another perfume, this one of the popular narcissus type, consists of:

Caryophyllin	10 minims
Extract of tuberose	16 oz.
Extract of jasmin	4 oz.
Oil of neroli	20 minims
Oil of ylang-ylang	20 minims
Oil of clove	5 minims
Glycerin	30 minims

A glycerin-containing ylang-ylang perfume, also given in the same source, is formulated from:

Extract of cassie (2d)	96 oz.
Extract of jasmin (2d)	24 oz.
Extract of rose	24 oz.
Tincture of orris	4 oz.
Oil of ylang-ylang	6 dr.
Glycerin	6 oz.

A frangipanni perfume, which also utilizes glycerin, is made from:

Oil of rose	2 dr.
Oil of neroli	2 dr.
Oil of sandalwood	2 dr.
Oil of geranium (French)	2 dr.
Tincture of vetivert (1¼:8)	96 oz.
Tincture of Tonka (1:8)	16 oz.
Tincture of orris (1:4)	64 oz.
Glycerin	6 oz.
Alcohol	64 oz.

Glycerin also enters quite extensively into the formulation of so-called "solid" or "frozen" perfumes. According to Poucher,[4] the well-known British authority on perfumes, soaps and cosmetics, "frozen" eau de Cologne offers a novel and convenient form in which this useful and refreshing toilet item may be carried in the hand-bag. The addition of suitable quantities of menthol imparts a desirable pleasing cooling effect to such products.

A typical solid eau de Cologne, in which glycerin is a major constituent, as given in one of the standard formularies,[5] consists of:

Sodium stearate, colloidal	325 parts
Aluminum hydroxide, colloidal	20 parts
Glycerin	600 parts
Cologne water oil	50 parts
Menthol	5 Gm.

Another procedure for making such solid cologne; utilizing a gelatin base, and given in the same source as the above, is as follows: Mix 150 Gm. white gelatin; i.e., gelatin containing zinc oxide or titanium oxide, with 750 Gm. hot water and let stand for 24 hours. Then add 50 Gm. of glycerin to which from 1.5 to 2.5 per cent of essence of eau de Cologne and from 0.5 to 1 per cent recrystallized menthol have been dissolved. A preservative will be needed for this preparation.

In another standard procedure, solid alcoholic perfumes are prepared with a base consisting of from 5 to 10 per cent of sodium stearate; the amount varying according to the degree of firmness required in the finished product. Sedgwick[6] has presented a typical formula of this type in which glycerin is an im-

portant ingredient and in which any desirable and suitable perfume compound may be incorporated. The formula suggested is as follows:

Alcohol	1 liter
Stearic acid	90 Gm.
Caustic soda (10 per cent sol.)	110 c.c.
Water	100 c.c.
Glycerin	120 c.c.
Menthol	12 Gm.
Perfume compound	15 Gm.
Phenolphthalein test solution	sufficient
Salicylic acid	sufficient

Heat the alcohol to 70 deg. and add the stearic acid and glycerin. When all dissolved, add a few drops of phenolphthalein test solution and pour in the caustic, stopping when the red-violet color disappears. While stirring, add the salicylic acid and then work in the perfume and menthol.

Peau d'Espagne, or Spanish Leather, employs a perfuming procedure which may also be classed in the solid type of perfume. In former, perhaps more elegant days, this was in much demand for treating leather which is intended for the manufacture of fine products. Still enjoying much popularity, such a product is prepared, according to Poucher[7] by immersing a piece of the material; e.g., tanned kid, chamois, etc., for about 10 days in a perfume mixture, such as the following:

Rectified oil of birch tar	5 c.c.
Sandalwood oil	25 c.c.
Bergamot oil	20 c.c.
Petitgrain oil	30 c.c.
Lavender oil	10 c.c.
Clary sage oil	5 c.c.
Coumarin	4 Gm.
Musk ambrette	1 Gm.
Rose synthetic	10 c.c.
Isopropyl alcohol	900 c.c.

At the end of this time it is removed and allowed to drain. It is then spread on a sheet of glass and after drying is coated with the following mixture:

Amber liquid	150 c.c.
Olibanum R	50 c.c.
Glycerin	200 c.c.
Rose water	350 c.c.
Acacia powder	250 Gm.

After being treated thus, the leather is pressed under a weight and allowed to dry. The dried leather forms the so-called perfume skin and will retain its odor for years. It is usually made available encased in a silk or satin envelope and when placed in contact with gloves, writing paper, etc., will communicate its perfume to the object.

Another formula for making this perfume skin is given by Forrester[2]. This author likewise presents a composition known as "Spanish paste", which is similarly used for perfuming jewelry, scent-boxes, fine leather goods and like. The basic preparation contains:

Powdered ambergris	6 dr.
Powdered benzoin	1½ oz.
Powdered musk	6 dr.
Powdered vanilla	6 dr.
Powdered orris root	6 dr.
Powdered cinnamon	6 dr.
Oil of bergamot	1½ oz.
Oil of rose	6 dr.
Acacia	1½ oz.
Glycerin	1½ oz.

Mix the whole, and add water drop by drop until a doughy mass is obtained. Divide into pieces of suitable size.

Glycerin finds quite frequent use in the manufacture of toilet waters. These lighter perfumed preparations, which find much more general use in the toilet of fastidious women, utilize not only the properties already mentioned but the valuable emollient and soothing qualities of glycerin as well.

A typical toilet water is given in the following method for making birch-bud water:[3]

Alcohol (96 per cent)	350 parts
Water	70 parts
Soft soap	20 parts
Glycerin	15 parts
Essential oil of birch buds	5 parts
Essence of spring flowers	10 parts
Chlorophyll	sufficient

Mix the water with an equal volume of alcohol and dissolve the soap in the mixture. Mix the oil and the other ingredients with the remainder of the spirit, add the soap solution gradually, agitate well, allow to stand for eight days and then filter. For use, dilute with an equal quantity of water.

Bay rum preparations are more in line with masculine toilet preparations. A typical glycerin-containing preparation of this type is given as follows:[5]

Citric acid	5.0 Gm.
Oil of myrcia	2.0 c.c.
Oil of myristica	0.1 c.c.
Oil of orange	1.0 c.c.
Alcohol	500.0 c.c.
Glycerin	30.0 c.c.
Purified talc	20.0 Gm.
Water, to make	1000.0 c.c.

Dissolve the oils in the alcohol, add the glycerin and citric acid, and then add sufficient distilled water to make the volume measure 1000 c.c. Add the purified talc. Filter, returning first portions until the liquid filters clear.

Cream colognes and similar perfume emulsions have begun to attract considerable attention during recent months and a revival of the use of such perfumed emulsion preparations appears quite probable. Glycerin serves a useful function in the formulation of such products, as is evident in the following formula:[9]

Glycerin	15.0 parts
Stearic acid	1.5 part
Quince seed	1.0 part
Potassium hydroxide	0.2 part
Gum karaya	0.3 part
Cetyl alcohol	0.5 part
Lanolin	1.0 part
Preservative	0.1 part
Water	79.9 parts
Perfume oil	0.5 part

From its chemical structure as an aliphatic trihydroxy compound, it is evident that glycerin can be made to react with other substances to produce numerous valuable glycerin derivatives. Many of these are useful in conjunction with perfume materials and certain of these derivatives have become standard raw materials of the perfumery field. Thus, the interaction between glycerin and acetic acid yield three acetic esters: glyceryl monoacetate (monacetin), glyceryl diacetate (diacetin) and glyceryl triacetate (triacetin). These acetins find extensive use in perfumery as solvents.

Poucher[4] lists glyceryl acetate among the more important neutral odor perfume fixatives. However, in a more recent discussion on fixation it was pointed out that such materials as glycerin triacetate are more properly classified as solvents or diluents in perfumery.[10]

PATENTS OFFER EXAMPLES

The patent literature also offers interesting examples of the use of glycerin derivatives in perfumes and perfume compounding. Thus, several years ago, Grunenberg and Katz[11] patented glyceryl fumarate and other higher acyl derivatives of glycerin as substitutes for ethyl alcohol. Being inodorous liquids of high solvent powers, they have a place in perfume formulation, as in the following example from the patent specifications:

Rose synthetic	10 c.c.
Glyceryl fumarate	40 c.c.
Water	60 c.c.
Glycerin	60 c.c.

In a more recent patent,[12] glycerin esters are described that are useful for extracting perfumes from plants.

From the foregoing it is quite evident that glycerin and certain of its derivatives do have an important and useful role in the perfumery field. That this usefulness can be further extended is without question.

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A Study of the Japanese Oil of Peppermint Industry

This final article in the series on Japanese peppermint oil discusses the Chinese oil . . . Increase in U. S. production may grow to the extent of becoming independent of Japan

by DR. ERNEST GUENTHER

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COMPARED with Japanese mint oil, the Chinese product is of minor importance. Statistics are not reliable because most of the producing regions are occupied by Japan.

Since comparatively little had been known about Chinese mint oil, the writer undertook a trip to Shanghai during January, 1939, in order to obtain a clearer picture of this industry. At that time there existed in Shanghai, several menthol factories which processed crude oil distilled in the province of Kiangsi, and to a limited extent in the province of Kiangsu.

The plant from which Chinese mint oil is produced has been classified as *Mentha canadensis* L. var. *glabrata* Gray; it resembles the Japanese mint. Consequently, the Chinese oil is very similar to the Japanese product, both oils containing a high percentage of menthol which can be isolated by simply freezing the oil.

USED AS MEDICINE IN CHINA

Mint oil is used as a medicine in China. The bulk of the oil which is thus consumed in Canton and Hongkong originates from the province of Kwangtung, where the Chinese drug dealers import the crude mint oil and have it bottled and labeled as their own product.

In China, mint is grown as a yearly crop in order to obtain a maximum yield of leaves. During spring, root cuttings are planted into well-prepared fields and, after a few weeks, the young plants begin to develop. When the mint attains a height of three feet the leaves are gathered and dried in the sun while the dried lower parts of the stalks serve as fuel.

PRIMITIVE DISTILLATION

The distillation is done in primitive apparatus of Chinese construction resembling those employed for the distillation of star anise and cassia leaves. One hundred catties (1 catty equals 16 ounces) of leaf material yield from ten ounces to one catty of oil.

In the following spring a new crop of mint is grown from root cuttings. It is claimed that the crop of leaves is very meager if the plant is permitted to remain in the ground for another year.

As far as the oil is concerned, considerable quantities have always been exported to Japan through the drug stores in Canton and Shanghai. But as far back as 1939, Japan had its own buying agents in the province of Kiangsi and therefore most of the oil produced in that province went to Japan for the separation of menthol.

As mentioned, previous to the war there existed a number of menthol plants in Shanghai and both menthol as well as dementholized Chinese mint oil reached the world market via Shanghai. The balance of the Chinese production went to Japan. It is impossible to obtain exact export figures.

PHYSICO-CHEMICAL CONSTANTS

According to Gildemeister and Hoffmann,[34] the constants of Chinese mint oil vary between the following limits:

	Complete Oil	*Dementholized Oil*
Specific Gravity at 15°	0.8990 to 0.9091	0.9018 to 0.9090
Optical Rotation	—30°2′ to —37°32′	—26°18′ to —29°7′
Refractive Index at 20°	1.46012 to 1.46469	1.46092 to 1.46281
Content of Ester Menthol	1.6 to 7.3%	7.8 to 11.1%
Content of Total Menthol	70.5 to 87.4%	62.5 to 67.6%
Content of Menthone (Hydroxylamine Method)	8.9 to 12.3%	around 15%
Solubility in 70% Alcohol	Soluble in 2.5 to 3 volumes, occasionally opalescent with more alcohol.	Soluble in about 3 volumes, opalescent with more alcohol.

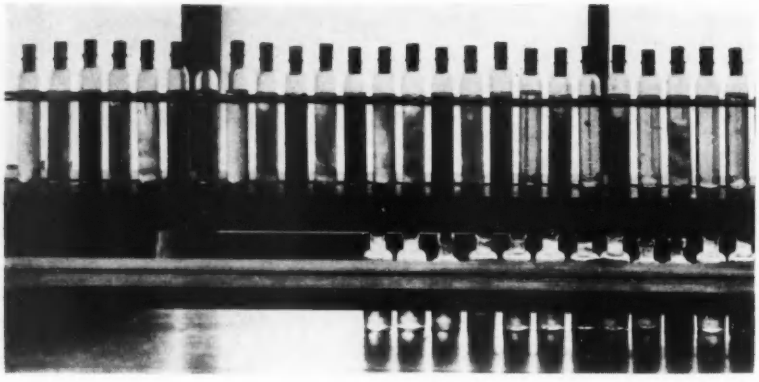
The physico-chemical constants as well as the odor of the Chinese oils closely resemble those of the Japanese product.

POSSIBILITIES OF U. S. PRODUCTION

Previous to the war, the United States and the rest of the world were entirely dependent upon Japan for the supply of natural menthol. Since, today, this source is no longer open to us, it is necessary to consider whether natural menthol cannot be manufactured in our country from domestically grown *Mentha arvensis*. An excellent and detailed study made by Sievers and Lowman,[35] some years ago, may serve as a guide for any such venture. For completeness sake, we shall mention here the most important findings of Sievers and Lowman.

Mentha arvensis grows and spreads through numerous underground runners and therefore requires, for normal development, a deep soil, rich in humus and retentive of moisture, but well drained. Light, loose soils which dry quickly, and heavy clay soils are equally unsuitable for the culture of Japanese mint. Favorable types are

[34] *Die Ätherischen Öle*, 3d Ed. Vol. III, p. 566.
[35] *Op. cit.*



The bottles shown above contain samples of the different types of Japanese Mint Oil

muck land, sandy loam river-bottom land and well-cultivated loamy upland.

Propagation is usually by means of runners in the same way as our American peppermint is propagated. Another method of propagating is by vegetative cuttings. These are made from the herbaceous portion of the plant in much the same way as other vegetative cuttings. They are rooted in sand and are then transferred to pots or set directly in the field. Japanese mint produces seed rather freely and the plant may be propagated by this means, but the method is unsatisfactory and does not produce plants uniformly true to type.

The harvesting should take place when the plants are as nearly as possible in what is usually referred to as the full-blooming stage. The cut herb may be distilled immediately or allowed to wilt for some time in the field, according to the practice followed with American peppermint and spearmint herb. It may be left in the swath until ready to be distilled, or raked into windrows after a period of wilting and then placed in cocks like hay for further curing. It should not be allowed to dry enough to become brittle because when handled in that condition many of the leaves will be lost, thus reducing the oil yield. The yield of oil from thoroughly air dried leaves was 2.2 per cent, from the stems 0.083 per cent and from the whole herb (calculated) 1.36 per cent.

DRYING INCREASES MENTHOL ESTER

From the tables given by Sievers and Lowman it can be observed that in all cases the drying of the herb had the effect of increasing the percentage of menthol present as esters. The total menthol content appears also to be slightly greater in the oils distilled from the dried herb. On the whole, the results indicate that drying of the herb does not have any important influence on the character of the oil. This fact makes it possible for a large grower to handle his crop at a somewhat lower cost. The capacity of his distilling equipment need not be so large; the weight of the material hauled is considerably less, and economies in distillation are possible through lower fuel consumption. Whatever procedure is adopted, it is necessary at all times to avoid excessive loss of leaves through shattering, for reasons already stated.

The distilling of *Mentha arvensis* may be carried out exactly like that of our American peppermint.

The yield of Japanese mint oil, when grown in the United States, averages thirty pounds per acre provided that the mint is in good condition. This is similar to the yield obtained from American mint.

Mentha arvensis has been attacked on the Pacific Coast, especially in California, by a form of mildew which causes severe loss of leaves. The other important disease of *Mentha arvensis* is a rust fungus which, likewise, attacks the leaves and causes them to drop, thus greatly reducing the yield of oil.

There are apparently no practical means of controlling either the mildew or the rust. Regions in which these are severe year after year are not adapted to the growing of *Mentha arvensis*. The best procedure is to cut the crop before the damage becomes excessive.

JAP MENTHOL PRODUCTION HERE

Menthol can be separated from oil of *Mentha arvensis* by using the apparatus such as described in the discussion of Japanese menthol. Since the outbreak of the war, the production of Japanese mint in the United States has been taken up rather extensively. Certain parts of Latin America are undoubtedly also well adapted to the cultivation of *Mentha arvensis*. It is to be hoped that the Western Hemisphere will some day become independent of the former Japanese menthol.

First Aid to Small Plants

FOR THE FIRST time small manufacturing plants have been given the opportunity to obtain technical information through one central government agency, a Technical Advisory Service set up by regions throughout the country by the Smaller War Plants Corporation, of which Brigadier General Robert W. Johnson is chairman. The service will be put at the disposal of the small manufacturer who requires technical research in the solution of a production problem, information drawn from governmental agencies, trade associations, technical magazine editors, and the research laboratories of educational institutions and private industry.

The Technical Advisory Service springs from an idea which was applied successfully in private business by Bert H. White, vice-president of the Liberty Bank, Buffalo, N. Y., now on leave to serve as a major in the Army Air Forces, from which he was borrowed by SWPC to set up the service.

The service itself does not engage in industrial research or testing. It enjoys the voluntary and helpful cooperation of the various government agencies, as well as that of an unlimited number of research laboratories. In a few isolated cases, where the nature of the information sought is such that it can be obtained only from commercial testing laboratories or professional service organizations, the technical advisory consultant will recommend several recognized leaders in that field with whom the applicants can discuss cost of service directly. Otherwise, Technical Advisory Service is free to all small manufacturers.

General Johnson, in announcing the establishment of the service, stated, "The war effort today, more than ever in view of current events overseas, can ill afford to lose the productive capacity of a single manufacturer and for that reason we are eager that all small manufacturers shall take advantage of the Technical Advisory Service which is available to them at their nearest SWPC regional office."

Where do Food, Drug, Cosmetic Industries Stand Today?*

This abstract deals with the cosmetic division of this paper, telling of the replacements this ingenious industry has used and of the possibilities of future developments

by MAISON G. DENAVARRE

PRINTING multicolored labelling right on the jar or bottle cuts down on the number of finishing operations; no glue worries; no air bubbles under the label; no labelling in fact.

Everyone is worried about caps. There are some paper caps on the way that will take care of the most urgent needs at first; then, any needs that may come up. One will not be made until later this year. It is the best of the lot. This cap will take plain or fancy finishing, depending on what you want it to do. When the war ends, this paper cap will sell for a fraction of the cost of metal caps. It can be used in automatic capping lines and will not break.

EQUIPMENT IMPROVED

Spray drying, dehydrating, grinding and filling equipment are in for some changes. Spray drying, for instance, has many uses other than in the manufacture of soap beads, but industry, rather than the equipment maker, had to find it out. Anyone acquainted with dehydrating equipment knows of the improvements that can be made. As for grinding, air jets will cause particles to hit each other so hard they will break up into tiny pieces. And if you want evenness of blend, this is the only known way to get it. The principle of the soft gelatin capsule may be used to fill foods, drugs and cosmetics in a way never dreamed of; in fact, filled, sealed and labelled in one operation. The principle of the Waring blender may be put into larger scale equipment. It easily disperses dry powders in an immiscible solvent, like sulfanilamid in oil; or it will quickly dissolve something in something else, like camphor in vegetable oil, with no loss of camphor. Greater use will be made of homogenizing, a process that enables the manufacture of stable emulsions that were impossible to make heretofore.

Collapsible tubes, both plastic and metal will see changes after the war. New metals and alloys will invade the field. Better and less porous plastics will be available. They will really fold over and stay put. There will be non-collapsible ejectors for shaving cream and tooth paste that cannot be made now because of metal scarcities.

MATERIALS

Distillation is a slow process at best, whereas, de-ionizing gives you cheap pure water anytime you want it, practically without waiting.

Synthetic menthol was freely available some time before the war, but there were few takers. Then came the war. The synthetic menthol was quickly snapped up; it didn't even have to be crystallized, nor did it have to be absolutely pure. When Java citronella oil began to run out, another process had to be evolved. As I write this, a new synthetic product called meta-homo-menthol, or methyl-dimethyl-cyclohexanol has been made, but it is completely sold out without any announcement to the trade. And to think the Japs once controlled the world menthol production, too.

Even a cheap and lowly material, such as talc, became hard to get. Coincidentally, one company was doing some development work with silicates when it happened upon a combination that was of the right bulking density, free flowing, odorless, high oil absorption, dead white and of fine particle size—the answer to every talc buyers' prayer.

In the realm of fat stretching, certain by-products may be used to stretch fats without applying against the quota. One in particular is similar to palm fatty acids.

GLYCERIN IN COSMETICS

For years it was believed that glycerin was used in cosmetics because it prevented the product from drying out. This is not exactly true. Glycerin will take up its own weight of water, at which point its hygroscopicity is dissipated. It will maintain a 50-50 ratio plus or minus a few per cent depending on the surrounding humidity. How then can a jar of cream be prevented from drying out if it contained 5, 10 or even 15 per cent of glycerin? Doubling this amount and adding 15 per cent for solids, you can retain only from 25 to 45 per cent of the total contents at most. Not only that, but there have come up in my own practice, occasional complaints directly traceable to glycerin. These things together with the unavailability of glycerin made it possible for other humectants and plasticizers to become more commonly used. Commercial sorbitol solution was a recent one. It gives up less moisture and picks up less moisture under changing conditions of humidity than any other humectant.

PROPYLENE GLYCOL A REPLACEMENT

Propylene glycol was recently given a clean bill of health for both internal and external products. It is today one of the most widely used glycerin replacements of all. Its hygroscopicity is similar to that of glycerin. It has the advantage of producing a drier feeling on the skin. It doesn't seem to irritate skins irritated by glycerin. Another product, recently synthesized, shows great promise as a plasticizer. It is not yet in real production but it will be someday. Then, of course, there is a host of specialties available from a score or more of suppliers.

In the field of emulsifiers we have tested many products in the last year that would have never seen the light of day if it hadn't been for the war. Most of them are surprisingly efficient. Last week I made a comparative test on a series of five new ones. Two of the five were not so good, but they weren't duds by a long shot. Creams and ointments can be made from these emulsi-

* Abstract of paper presented before Associated Drug and Chemical Industries of Missouri, Sept. 8, 1943, St. Louis.

fiers because they are made from non-critical materials.

Perfume and flavor oil solubilizers are making it possible to stretch alcohol supplies many times. Together with isopropyl alcohol they are keeping a lot of cosmetic houses in business for you can deodorize isopropyl alcohol to a considerable extent, then "treat" it a bit to produce a product that is not at all unpleasant. In fact, one company is getting ready to make a cologne from straight isopropyl alcohol and perfume. If it weren't for isopropyl alcohol, the rubbing alcohol market would probably have been extinct. Instead, there are plentiful supplies on the market. Isopropyl alcohol is here to stay. It is no longer a substitute. It is a standard material.

ARTIFICIAL FLAVOR OILS

Some flavor oils are practically non-existent. This has caused the development of artificial flavor oils, such as those of orange, lemon, nutmeg, cassia and others. Their flavors are in some instances a bit ahead of nature. They are more uniform than natural oils, although they may contain some natural material. The fact that they are artificial should mean nothing, for in flavors *the taste is the thing*, not the physical or chemical criterions of the substance that produces the sensation.

COSMETIC OINTMENTS

Ointments would still be made from the old and true bases such as petrolatum and lanolin with a bit of beeswax if it weren't for the enormous strides made in solid and liquid emulsions by the cosmetic industry. As a result, some specialty ointments are already appearing in the emulsified form. Some are greasy, others are greaseless, yet if 50 per cent water is used in a greasy vehicle, the product becomes practically greaseless on application. In addition, slowly accumulating evidence shows that therapeutic results are greater when the ointment is emulsified.

COSMETICS

War has played havoc with the cosmetic industry. We have less of practically everything to work with, yet the industry continues to supply the demand for merchandise. No new equipment, no metal of any kind, fewer bottles, no caps, less alcohol, no glycerin, less fats, no wetting agents, little lanolin, no glycerin derivatives, very little propylene glycol and so on. Scarce labor and labor turnover are no minor problems either.

The cosmetic industry has really been ingenious. Its present high sales volume will seem like a low point in ten years or less because there are going to be lots of new things, with more people using them. That is the key—*more people using them*. Self-sterilizing creams, truly therapeutic creams, better cold permanent waving, shampoos for soft or hard water that won't dry the hair and the scalp, bottled stockings that will be a treat to apply and wear, insect repellents, longer-wearing lipsticks, not to mention real advances in the manufacture of all toiletries. In spite of all this, the big business will be in make-up and there are going to be make-up innovations that we yet cannot begin to conceive. In the line of self-sterilizing creams, it is ordinary logic to make such creams so they won't act as culture media for germs.

Hormone creams are not as crazy as they may seem. And I have yet to see controlled proof that they are as dangerous to use as some would like to have us believe. Any woman past 40 years who has used a good hormone cream will testify to its effectiveness.

FUTURE FOR WETTING AGENTS

The cosmetic industry was just beginning to catch on to the use of wetting agents when the war started. Few people ever really appreciated them, but much has been learned about them during the war. These findings will be put to practical civilian use when the war is over. Shampoos that won't dry hair but will work in hard and soft water alike will be one thing.

Dentifrices will have a rich flavor because wetting agents have replaced flavor-killing soap. Bar soap that lathers in all kinds of water, etc.

COLD PERMANENT WAVING

Cold permanent waving is no momentary novelty. It is here definitely. But it still needs a lot of research to make it effective on all textures of hair, to keep it from becoming inactivated between the time it is bottled and the time it is used, to keep it from ruining the fingers and finger nails of the hands of the operators. It will have to be a direct application method because the circulation system is too cumbersome and involves a large cash outlay.

Someone will make an anti-perspirant that will work for several days, will prevent clothes from rotting, will not crystallize in the jar and will not be sticky on application. All the products on the market today, suffer from one or more of these faults.

PERFUME SOLUBILIZERS USED

With the dearth of alcohol came cream colognes and less alcoholic colognes. But perfume solubilizers, mentioned earlier, have simplified this problem greatly. A little perfume solubilizer, some regular alcohol and maybe a little isopropyl alcohol, and you can make all the shaving lotion, toilet water and other alcoholic cosmetics you want. It takes some experimenting, but it is being done. Isopropyl alcohol can be so fixed as to be but faintly more odorous than ordinary alcohol. With the right perfumes it will not be noticeable. In fact, isopropyl alcohol should be included in some toilet-water formulations if you want to bring out the fragrance. It seems like a paradox but it is a fact.

One hair-dressing manufacturer anticipated the alcohol shortage by developing an emulsified hair dressing. After considerable work, a stable dressing was evolved. Using his own words, "It is the fastest-selling product we have ever made." With the alcoholic type so firmly entrenched, this company proved again the fallacy of sitting back on old laurels.

MAKE-UP ITEMS THE BIG MOMENT

Novel types of make-up like pancake will be in evidence after the war. The two major advances in make-up during the last 20 years are grinding of face powder and the fabricating of a cake of powder which on application produced a very dull or matt finish. There have been no major changes in lipstick in this time. It is only reasonable to expect something momentous. Rouge is practically unused. Something else will have to be developed to take its place. Nail polish has been much the same for the last 15 years or more. Either a new type of nail enamel will have to be developed or something will have to be done to overcome the drawbacks of present-day preparations.

INSECT REPELLENT A FUTURE ITEM

One of the newer things that will be added to the lengthening list of cosmetics will be insect repellent. One application will protect the user for a couple of hours while gardening or sitting out during a picnic or at night to enjoy the cool evening air.

The unorthodox things that are being done to make ends meet will be an aid after the war. Not only that, but we will be less dependent on foreign sources for supplies. Japan will no longer monopolize supplies of menthol, agar and silk. We will no longer have to depend upon Italy for citrus oils, we no longer need her supplies of sulfur and citrates. A number of chemicals that originated in Germany will no longer have to be imported. Natural products coming from inaccessible places because of the war are being replaced largely by domestic supplies, either natural or synthetic.

When Is Post-War?

by MILTON F. MARTIN.
U. S. Industrial Chemicals, Inc.

NO ONE KNOWS the day, the month, or even the year when World War II will be ended. No one knows, therefore, when we will enter the much discussed and planned for post-war era. Furthermore, no one knows what conditions will confront us in this post-war era. But, with all these unknowns, forward-looking American business is studiously laying its post-war plans. This is typical of American enterprise. We have never waited until after the race to place our bets. We have always been ready and eager to meet difficult problems head on.

Our company is typical of many other American concerns, I think, which cannot answer the question—"when is post-war?"—but which are piecing together the sections of the post-war puzzle. As a supplier of alcohol and other chemicals, our post-war problems are as wide and ramified as are the post-war problems of each and every industry using our materials. It is obvious, therefore, that we must analyze and anticipate the post-war plans of these consuming industries if we, as suppliers, are to steer an intelligent course into the future.

The toilet goods industry is one of the industries which we—as alcohol producers—have long serviced, and one which we must study in the light of post-war developments.

DOLLARS AND CENTS OUTLAY

Reliable statistics indicate that in the first normal year after the cessation of hostilities, the toilet goods industry should enjoy at least a 36 per cent increase over 1940 in volume of sales. These figures show that the industry should do $690 million as compared with $508 million in 1940. Those of us who know how enterprising the toilet goods industry can be will appreciate that this increase is not out of reason. There is no question that the demand for toilet articles and the ability to purchase them should continue on an upward trend after the war. Raw materials—especially alcohol and glycerin—, containers and closures, will enable manufacturers to convert back to normal production in a very short period of time. Reasonably high-priced levels should remain in effect, and taxes should not adversely affect the upward trend of sales because a huge pent-up purchasing power will be released when consumer goods are again available.

The toilet goods industry has been growing steadily over the past years, and industry figures show that in a normal year $800 million are spent for goods and services to enhance beauty. Cosmetics, since early civilization, have always been demanded by women, and the industry has conducted intensive advertising to stimulate this demand. In these war years, more and more women have invaded industry and made themselves financially independent, thus enabling them to spend more money for self-beautification. This trend is of tremendous importance to the toilet goods industry, as these women will never again be content to be without the cosmetics they have learned to use. Although all of the women now employed will not continue to work after the war, even as housewives they will not lose the cosmetics habit.

Each year, younger girls are taking up cosmetics. The demand for war workers has brought many women to urban areas where they have soon learned that cosmetics are a part of their "street-wear." The motion picture, the picture magazines, and intelligent advertising have all contributed to this ever-growing demand for toilet articles.

Beyond this age-old demand for cosmetics by women has come a more recent growing interest in men's toilet lines. In this direction, as well, the war has had its stimulating effect. There are very few gifts which sweethearts can send to their service men, and among these gifts are toilet and shaving sets complete with after-shaving lotion, cologne and talcum. There is no reason to believe that men's toilet lines also should not continue in growth after the war.

As suppliers, we should know what improvements the toilet goods industry wishes to make in products of the future. What does it consider the perfect solvents and chemicals for specific cosmetic products? If new and improved raw materials are needed, in what quantities will they be produced? Will the need exceed the supply?

COOPERATION MEANS PROGRESS

This means cooperation between users and suppliers, and cooperation between industry and trade associations. There is a natural tendency, of course, for each one to guard closely his post-war secrets; but, without giving away such secrets, some way must be found for suppliers and users to work together closely on their post-war problems.

It would seem that trade associations are the natural meeting ground for a healthy exchange of information and plans for the future. As a rule, manufacturers of toilet goods and suppliers are both linked together by one or more trade associations. When a trade association's post-war planning board is set up, representatives from principal supplying industries should be called in as members of the industry's planning board. Starting from this point, it can reasonably be expected that more concrete and detailed plans will be laid for increased business, maximum employment and a higher standard of living after the war is won.

We don't have to know the answer to "when is post-war?" to build our plans for a better post-war world.

Nail Cream—Answer to Remover Dryness

THE DRYNESS and brittleness of finger nails caused by nail polish is generally considered to be due to the solvents which these materials contain, such as acetone, possibly in combination with other solvents which are equally good solvents of fats. The polish remover also consists largely of acetone. It can therefore easily be understood that upon repeated application and removal of nail polish, the natural oil as well as the chloresterin and liquids with which the nails are provided by nature to keep them supple are removed with subsequent brittleness and breaking.

It is because of this widespread condition of the nails that nail creams have come to fill a definite need and now are a part of modern cosmetics—a firmly installed item.

In extremely severe cases the nails should be bathed in a mixture containing 10 parts of alum dissolved in 90 parts rosewater or other suitably perfumed watery solution, after which lanolin cream is applied, according to "Nail Creams" in *Schimmel Briefs*.

Specially medicated creams of this type may be made as follows:

White wax	15
White ceresin	10
Almond oil	30
Tartar	35
Citric acid	4
Alum	6

Almond oil	25
Petroleum jelly	15
White wax	5
Anhydrous lanolin	5
Water	75

Packaging PORTFOLIO

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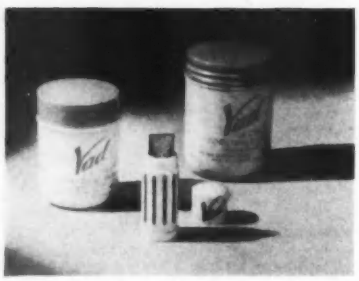
MARY DUNHILL

BARBARA GOULD



VAD

ANTOINE: Gift box of delicate pink, lettered in blue and purple and decorated with a bright purple satin bow. The set contains creamy cleanser, night cream and cleansing cream for dry skin

CYCLAX OF LONDON: A new simplified three-step beauty treatment set which includes cleansing lotion, skin cream and a generous cake of mild skin soap

MARY DUNHILL: Attractive shell packages on which the maker's name and motif are embossed. The group comes in yellow, pink, green or blue, each color representing a Mary Dunhill scent. Lipstick and rouge cases are plastic, with the shell design permanently imprinted

DORALDINA: Duo in beauty, a new bath set containing La Conga Cologne and bath powder scented with the elusive La Conga fragrance. The set may be purchased with or without the gift box

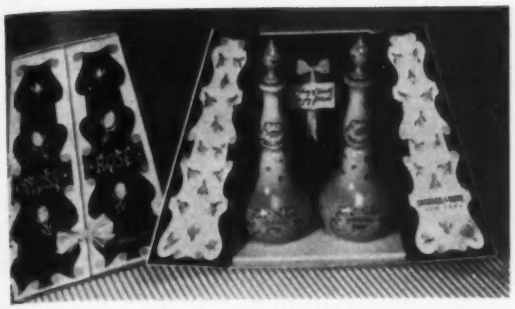
DAGGETT & RAMSDELL: Dusty pink plastic lipstick and loose powder compact in a pink gift package, silk-lined

GOURIELLI: The name suggested by the legendary bridal verse, "Something Blue" makes its debut in a periwinkle blue rayon faille box. The heart-shaped sachet is attached by a corsage pin

MARY DUNHILL: Face It, a new non-drying make-up base. It comes in four shades to be worn with or without powder

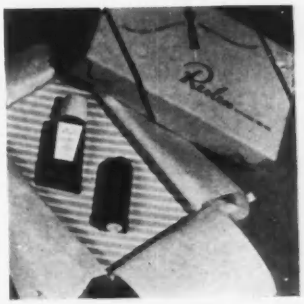
BARBARA GOULD: Dramatic Red lipstick, a new fall shade in pink plastic case delicately trimmed with ivory design

VAD: Regular Cream, honey-colored, delicately scented, contains 50 per cent codliver oil. Greaseless Cream, used as a powder base, is pure-white. The plastic-cased lipstick is made with a codliver oil base — comes in five shades



CHARLES OF THE RITZ

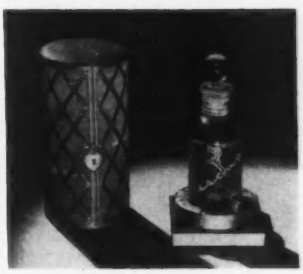
DERMETICS



REVLON

COTY

FABERGÉ



MARY DUNHILL

SPERTI

TONE

ELIZABETH ARDEN

HELENA RUBINSTEIN

CHARLES OF THE RITZ: Moss Rose Metronome set in an unusual gift box containing two fragrances, Scented Balm and Cologne

DERMETICS: Mist, Charm of the Redwoods, is a breath deodorant made from chlorophyll extracted from the Redwood, packaged in three sizes. A few drops on the tongue after smoking or cocktails sweetens the breath

REVLON: Chartreuse miniature dress box holds Bright Forecast nail polish and lipstick to match. Set is named Couturiere Box

COTY: Still obtainable in a full range of de-luxe packages are many Coty fragrances. L'Origan in a new size in a golden case

FABERGÉ: Finely - powdered sachet, one scent to match each of five famous perfumes

MARY DUNHILL: Blue satin package, padlocked in gold, holds Escape perfume, a new fragrance for escape through romance

SPERTI: SRF (Skin Respiratory Factor) Night Cream and Day Lotion in blue, pink or white ceramic jars. Based on a recent scientific discovery, these new cosmetics maintain, restore normal skin respiration

TONE: Clear - toned Bittersweet Complexion Tint developed for perking up a faded suntan. A heavier version made for leg lotion

ELIZABETH ARDEN: Blue Grass Cream Flower Mist in a creamy milk-white version

HELENA RUBINSTEIN: New White Flame perfume in cylindrical box of purple moire silk

STAY-SHEEN: Hair pads, lacquer base — no gum — approved by A.M.A. as harmless and non-irritating. Lacquer-saturated lightly-scented loosely-packed so that there is sufficient lacquer in jar to prevent drying out

SKAT: An insect repellent with four-hour effectiveness and a non - objectionable odor

STAY-SHEEN

SKAT

BritishLimitation on Hair Products

THE TOILET Preparations British Order 1942 which became operative on January 1, 1943, for six months and has now been extended for two months more provides that, except under license, no person shall, in the course of his business, manufacture any controlled goods intended for application to the hair (other than hair dyes, shampoos or depilatories) wholly or partly from petroleum or any product of petroleum. By "controlled goods" is meant perfumery and toilet preparations, whether medicated or not, other than any articles to which the Soap (Licensing of Manufacture and Rationing) Order 1942 applies—dentifrices, shaving soap and shaving cream. Stocks of hair preparations already made, however, could be supplied within quota limits.

Similarly the Order prohibits the manufacture, save under license, of any controlled goods comprising more than one part (calculated by weight) in 200 of:

Acetone	Butyl acetate
Amyl acetate	Butyl alcohol
Amyl alcohol	Ethyl acetate
Methanol	

The object of these prohibitions was to save shipping space and conserve materials needed for war purposes.

PROVISIONS OF NEW ORDER

The Board then decided to extend these restrictions to cover the supply of these goods by all persons. The new Order prohibits:

a. The sale of hair preparations of their own manufacture containing petroleum products (except dyes, shampoos and depilatories) by registered manufacturers after December 31, 1943, and by all persons, including wholesalers and retailers, after February 29, 1944; and

b. The sale of toilet preparations of their own manufacture containing over one in 200 (by weight) of any of the solvents listed above by registered manufacturers after October 31, 1943, and by all persons after February 29 of next year.

As regards what may happen at the expiration of the extended quota period in respect to the general control of toilet preparations, it is believed that a new order will be issued later designed to stop or check flagrant abuses by which the existing control is alleged to be defeated. In the House of Commons on July 8, Major Lloyd George, a member of the Government, referred to circumvention of the control by racketeers.

Anticipating the Demand

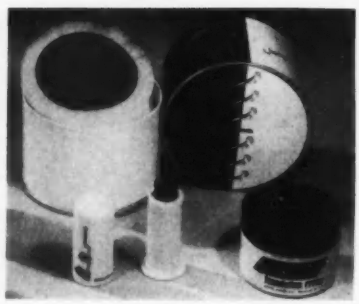
THE PRESENT period embodies speed. It is therefore essential that the promotion of various cosmetics and other accessories be based on this theme. The leisure of a few years ago when women had more time than they needed to apply creams, lotions and powders is not for today. Today the quickest make-up, the quickest treatments; the fewest applications—these are the demands of the new war-time woman.

The cosmetic industry is always ready with preparations and ideas to meet the demand, even before women realize that the special ones promoted are the ones for which unconsciously they have been looking.

One of these requisites which it is wise for every line to include among its products is an oil—an oil designed for various treatments or for an all-purpose treatment. Many lines have foreseen this trend and now have just such a product, an oil that may be left on for just the few luxurious minutes required for a bath, and which during these few minutes acts as a cleanser, lubricant and even as a make-up foundation if the natural look is desired.

As an example of what some lines are doing, just such an oil is shown in the group illustrated below. This particular house, Mona Manet, also has anticipated the need for speed in the beauty salon. For a quick freshening and pick-up at the end of the day—or any time during the day for that matter—Miss Manet has added a new department, The Lotus Room, to her salon where operators perform the main essentials in just 50 minutes. These consist of shampoo, wave, manicure and facial make-up.

In charge of this room to see that no delays occur and that every customer leaves with that refreshed and satisfied feeling that a treatment should convey, is Miss June Elvidge formerly of the stage and screen. Her mere presence gives that contented and sure-that-everything-will-be-right feeling.



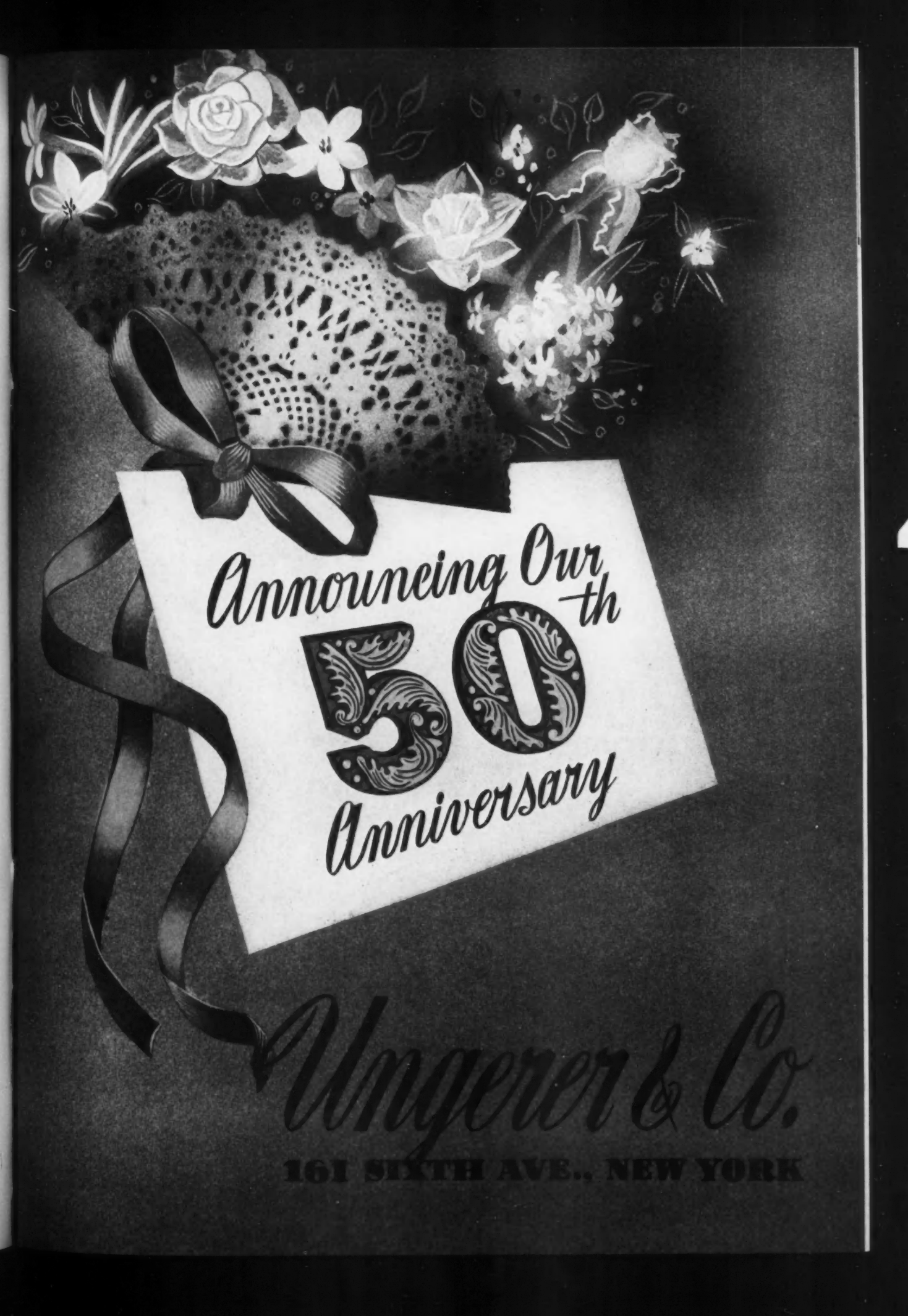
ABOVE and BELOW: The Mona Manet line of cosmetics, including lipstick, powder, foundation cream, astringent, rouge, beauty oil

The "Straphanger", a most useful bag fully equipped with Marie Earle Preparations

INTERESTING PRESENTATIONS

Another well-known house foresaw another need of the present-day woman in a carry-all bag, called the "Straphanger." This interesting draw-string shoulder-type bag, by Marie Earle, is made of fine wool felt with contrasting lining of the same material. This assures durability, one of the qualities that war-conscious women are seeking in all their purchases today. In this bag is ample room for the products necessary to a beauty treatment during a week-end trip or for a freshen up at the end of the day for that important cocktail party or dinner date. And moreover, there is plenty of room for the ration books, the small purchases that one must carry, not only at the request of the store, but because it is a government regulation.

It is these anticipatory ideas that houses who wish to take advantage of every merchandising opportunity must seek out and develop to keep their products in demand and more than top last year's sales.


Announcing Our 50th Anniversary
Ungerer & Co.
161 SIXTH AVE., NEW YORK

50th Anniversary Message

William P. Ungerer
Founder of the business,
President 1901 to 1907

William G. Ungerer
President 1907 to 1930

Frederick H. Ungerer
President and Treasurer

May we pause in this 50th year to express to our many friends, customers and contemporaries our sincere appreciation for their cooperation, their confidence and friendly helpfulness which has made the present organization possible. In this spirit we pledge our best efforts and utmost resources in the continuance of ever higher standards and progressive service to the industry.

(1893-1943)

UNGERER

161 Sixth Ave.

BOSTON · PHILADELPHIA

from the Ungerer Organization

K. G. Voorhees,
Executive
Vice President

I. H. Budd,
2nd Vice Pres.,
Director of Sales

H. B. Moore,
3rd Vice Pres.,
Comptroller

W. A. Bush,
Sales
Manager

G. V. Branigan,
Research
Chemist

W. H. Dunney,
Jr., Perfume
Chemist

W. H. Dunney,
Perfume
Chemist

Harry Ahles,
Chicago

E. M. Tysdal,
Chicago

& COMPANY

New York City

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N. E. Gallagher New York

Essential Oils

Basic Raw Materials

Aromatic Chemicals

Perfume Specialties

Flavors

C. T. Perez New York

G. R. MacDonald Boston

50th Anniversary

UNGERER & COMPANY

161 Sixth Ave., New York

Flavors

Spices Look Homeward to Meet Far Eastern Loss

Central America possesses the same climate as the Spice Islands . . . With proper cultivation and selection of location Western Hemisphere spice production should equal Far Eastern

LONG BEFORE the introduction of the tin can and refrigeration for the preservation of foods, spices were used for the preservation of meats. Today with tin needed for the more important uses of war the ancient role of spices emerges in dramatic importance. Spices may well again perform their old-time function of preparing and preserving meats with the shortage of refrigeration facilities, not only for ourselves but also for our Chinese and North African allies who, even if they had refrigeration equipment, have not the facilities to operate it.

SOURCES OF SPICES

Whence will come these spices? Practically all former sources of spices have been cut off. It is authoritatively stated that many of these spices can be obtained by countries at our very door; the Caribbean countries, as both soil and climate in these South and Central American countries equals that of the Far East.

A few of the many spices that are obtainable in this hemisphere are allspice, capsicum, cardamon, ginger, nutmeg, clove, cinnamon—to mention only a few. Consequently it may come to pass that the Western Hemisphere may in time become the world's new spice source, according to the Middle America Information Bureau, conducted by United Fruit Company.

There are some who contend that any flavoring is a spice. They would include in this category many native herbs and aromatic plants, but the old familiar spices, like an ancient and royal family, seem to have the exclusive right to the name. However, one outsider has been admitted; today vanilla is recognized as a member of the group.

Pepper, cinnamon, cloves — all are possible of production in the Western Hemisphere in the tropical climate of the West Indies and Central America. In fact, clove trees have been grown in Central America for some time. The tree requires seven to ten years before a crop can be harvested but, once grown, the tree long outlives the life of its planter and frequently remains in bearing for a century. These trees have thrived on the Island of Santo Domingo, but before World War II, Dominican planters were unable to compete with European importers who levied high duties on the Dominican product.

Even today allspice holds the record of having made good in competition with Far Eastern spices and brings excellent returns on its crops. Although Spanish explorers introduced the spice to Europe, the allspice trees, or pimento, are unique in that they have never been taken from the countries of the Caribbean, their native soil.

JAMAICA A PROFITABLE SOURCE

The brushlands of Jamaica have been cleared, seedlings planted widely, and today beautiful and profitable plantations of allspice trees reward the cultivator. The trees require from six to ten years before bearing, grow on shallow limestone soils of all Central American countries as well as in Jamaica. It is a very easy tree to grow and almost anyone in the Central American zone can raise the tree very profitably.

Another spice that grows extensively in Central America, particularly in Guatemala, is the costly jungle herb, cardamon. Each tissue-thin capsule must be individually snipped for its tiny spicy seeds, and carefully guarded against moisture.

GINGER THRIVES HERE

The ginger plant was brought to the Western Hemisphere as early as the sixteenth century and the ginger root exported in large quantities to Europe. Brought from the Far East, the ginger plant has adapted itself readily to the soils and climate of many Caribbean countries. It, too, is easily cultivated.

Capsicum is another spice that has been found profitable for production in the Western Hemisphere. With the introduction of these peppers into Europe the commercial production of capsicum has been profitable for the Americas.

WHY TRADE SO SMALL

With soils and climates proven as suitable to spice production as those of the famous Spice Islands, the question naturally arises why is there relatively so little spice production in the Caribbean area? The answer is found in the century-long methods used by the early exploiters of the Spice Islands to keep for themselves the exclusive control of the markets of the world. The Dutch made it punishable by death to take away the seeds of the cinnamon tree. Likewise they sought to destroy the fertility of the nutmeg kernels by soaking them in lime. All wild clove trees were deliberately destroyed ex-

cept those chosen by their owners for cultivation. Sailors from ships were not allowed on the islands and trading was done while ships rode at sea. These methods together with high duties on Central American spices were effectual in keeping the source of spices localized in the Far Eastern area.

PROBLEMS FACING GROWER

There is no reason now why the familiar spices cannot be grown profitably in Middle America. Difficult problems, however, face the grower. He has an immediate need for trained scientific assistance. He must also know the best planting material and proven cultural methods. Soil and proper location must be carefully chosen.

PROTECTION AFTER THE WAR

Equally important, the new growers must be protected against the flooding of the market after the war by the Far Eastern crops grown by coolie labor and exploited by collusive trusts.

Wide-Mouth Containers

The requirements of eastern applicants seeking to qualify for an upward adjustment of maximum prices of wide-mouth glass containers shipped to ease West Coast shortages were simplified by the Office of Price Administration under Amendment to Maximum Price Regulation 382, which became effective Oct. 2, 1943, and alters the requirement that individual applicants "demonstrate" that the proposed shipment will relieve an actual shortage and will not cause a shortage in the Eastern area.

The Office of Price Administration stated that the requirement placed an undue burden upon the applicant and revised the section to require only sufficient data to identify the item being shipped and the prospective seller and purchaser in addition to any information which the applicant has "readily available" regarding a shortage which the proposed shipment will relieve and its effect on eastern supplies of the item.

At the same time the amendment eliminated an extraneous reporting section of the requirements for applicants granted relief under the local shortage provisions of the measure. As amended, applicants are covered by the general reporting provision in the regulation which states that "persons affected by this regulation shall submit such reports to the Office of Price Administration as it may from time to time require, subject to the approval of the Bureau of the Budget in accordance with the Federal Reports Act of 1942."

Action of Propyl Gallate on the Autoxidation of Oils

by E. BOEHM and R. WILLIAMS

MANY ORGANIC compounds containing olefinic linkages oxidize spontaneously on exposure to atmospheric conditions. The presence of such linkages in fats and oils, therefore renders these complex organic mixtures susceptible to atmospheric oxidation. When this oxidation process reaches a sufficiently advanced stage the oil is said to be rancid and assumes an unpleasant taste and odor. But, in addition to these objectionable properties, the vitamin content, and hence the nutritive value, of the oil has been shown to decrease.

The development of rancidity is retarded by the addition of minute quantities of anti-oxidants, e.g., hydroquinone, catechol, pyrogallol and 1:2:4-hydroxyhydroquinone. In the case of phenols, although no definite relationship between antioxidant properties and chemical constitution has yet been established, marked anti-oxygenic activity seems to be associated with the presence of two or more hydroxyl groups in certain positions of the aromatic nucleus, as in catechol, hydroquinone, and pyrogallol. The authors have also investigated the anti-oxidant properties of gallic acid and certain of its esters, and compared their properties with those of certain well-known anti-oxidants. From the practical and commercial standpoint, e.g., ease of solubility at relatively low temperatures, acidity and color, and from the point of view of general effectiveness, normal propyl gallate is considered the outstanding anti-oxidant of this class.

Pure anhydrous propyl gallate (normal propyl 3:4:5-trihydroxybenzoate) is a white-creamy, odorless, solid melting at 146 deg. to 148 deg. C. The properties of this substance were compared with those of pyrogallol and gallic acid as an anti-oxidant in lard, using concentrations ranging from 0.01 to 0.5 per cent. Pyrogallol turned the lard brown, whereas with propyl gallate and gallic acid it remained white. The effectiveness as measured iodometrically (the procedure adopted throughout the investigation) was of the order: pyrogallol, propyl gallate, gallic acid.

Tests were also made with arachis, linseed, cod liver, soya bean, cotton seed, almond, coconut and palm oils, and with suet, and on the relative values of propyl gallate, gallic acid, pyrogallol and Siam benzoin on the autoxidation of lard. It was found that the inhibition afforded by 0.1 per cent propyl gallate in lard was equal to that obtained by ten times as much Siam benzoin and probably greater than that of 30 times as much Sumatra benzoin. For lard stored under ordinary conditions 0.05 per cent propyl gallate provided adequate protection. Propyl gallate exerted a considerable protective influence on every oil which was examined. Tested on suet little difference was found between the effects of methyl and propyl gallate, but the latter is more soluble.

Tests were made for the authors in the Society's Pharmacological Laboratories on the toxicity of propyl gallate, using propylene glycol as a solvent. Tested orally on mice propylene glycol could evidently be given in doses of 0.02 mil per gram weight with safety. The LD50 of propyl gallate was put at approximately 2.0 mgm./gm. of mouse, while a corresponding lethal dose of pyrogallol was 1.0 mgm. On the skin (of guinea pigs and humans) no untoward effects by propyl gallate were observed, although pyrogallol produced a severe erythema. The experiments are being continued. One of the authors took 0.5 gm. of propyl gallate on six consecutive days without any noticeable effect on the urine.—*Pharm. Jour.* 151, 53, 1943.

Guaiac Juice

According to Dr. H. S. Mitchell and H. C. Black of Swift & Co., gum guaiac is now being used extensively in preserving meats and other foods for long-range use by the armed forces. The juice of the guaiac plant tends to prevent fats from becoming rancid and from losing their palatability. It will shortly be used in preparing dehydrated foods and vegetables. Paper wrappings of fatty foods will also be impregnated with guaiac juice to prevent the fats from soaking through.—*Food Materials.*

Brand Names

No manufacturer can afford to put a brand or a trade name on an inferior product. Anonymity is the only cloak under which the "just as good" product can be handled and sold. A brand name on a product is the best possible protection for the consumer because it automatically forces the maker of that product to maintain quality—*J. H. Van Deventer.*

Basic Principles in Manufacture of Emulsion Flavors

Scarcity of alcohol and other available solvents warrants republication of fundamental investigation at Mellon Institute in 1920 . . . Discussion of gums as emulsifiers

by MELVIN DEGROOTE

EMULSIONS prepared according to the following formulas and compared with formula three will illustrate this point—See September AMERICAN PERFUMER.

FORMULA NUMBER SEVEN

One and one-half ounces powdered gum tragacanth.

Three ounces powdered whole milk.

One hundred ounces oil of lemon.

Fifty ounces chemically pure glycerine.

Fifty ounces distilled water.

The milk is mixed with the gum, and the emulsion is prepared as in formula number three.

FORMULA NUMBER EIGHT

One and one-half ounces powdered gum tragacanth.

One-half ounce best edible egg albumen.

One hundred ounces oil of lemon.

Fifty ounces chemically pure glycerine.

Fifty ounces distilled water.

The albumen is mixed with the gum and the emulsion is prepared in the same way as in formula number seven.

GUMS CAUSE SEPARATION

It is interesting to note that the use of gum acacia and gum tragacanth together is more likely to cause the emulsion to break than to stabilize it. For instance, if an emulsion is prepared according to formula number one it may be thinned to some extent with more water. If, after adding the four ounces of water specified in the formula, four ounces more are added, it will be found that the emulsion is considerably thinner, but that the oil of lemon rises toward the top on standing. It might be assumed that if, instead of adding water, a one and one-half per cent solution of gum tragacanth were added, this difficulty would be overcome. This is not the case. However, the use of the gum makes an emulsion that is more viscous, but it is not permanent.

The same thing is true if an attempt is made to improve formula number three by the use of an addition of gum acacia. The following formula will illustrate this point:

FORMULA NUMBER NINE

One and one-half ounces powdered gum tragacanth.

Three and one-half ounces powdered gum acacia.

One hundred ounces oil of lemon.

Fifty ounces chemically pure glycerine.

Fifty ounces distilled water.

The gums are mixed together and emulsified as in formula number three.

Remarkable as it may seem at first thought, the difference in specific gravity between the dispersed phase and dispersing phase has very little effect on the stability. Naturally, if the oil and the gum solution had the same specific gravity, there would be no tendency for the oil to rise to the surface. If an emulsion is prepared according to formula number three and another in which the glycerine is replaced by water, it will be found that, in the latter case, there is less difference between the specific gravities of the two phases, but the emulsifying action of the glycerine more than counteracts the increased density.

METHOD OF MANIPULATION

The method of manipulation is very important. The best results are usually obtained by intimately mixing the emulsifying agent and the substance that is to be the dispersed phase, and then adding the water or dispersing phase. In gum emulsions, for example, it is preferable to mix the gums with the essential oil, and then add the glycerine and water all at once. An attempt to prepare a mucilage from the gum and water or glycerine, and then incorporating the oil, usually proves to be a flat failure. The oil does not wet the mucilage and it is difficult to obtain a contact, so that agitation will rend apart the oil drops. However, it is known that when the oil is added to the gum, the oil does wet the gum, and likewise the same gum is capable of being wetted by water. Therefore, when water is added to the oil-gum mixture, an initial emulsion is formed almost instantly at the contact surface. It is generally desirable to add the dispersing phase all at one time, although many manufacturers prefer to add the water solution in small portions. It has been previously noted that, in a way, this is comparable to adding all the water and agitating, then allowing the emulsion to rest and agitating again. Beyond a doubt the appearance of an emulsion is sometimes improved by adding approximately half of the dispersing phase and emulsifying, and then slowly adding the other half. This may be illustrated by the following formula:

FORMULA NUMBER TEN

Four ounces finely powdered gum acacia.

Eight ounces oil of lemon.

Six ounces distilled water.

Six ounces chemically pure glycerine.

This may be mixed in the same manner as in formula number one. However, if just half of the water and glycerine is added, and the mixture is then emulsified, and the remainder is added and mixed in, it will be found that the emulsion will have a smoother appearance, but may not necessarily be more permanent.

INFLUENCE OF TEMPERATURE

The temperature at which emulsions are mixed is an interesting factor. In pharmaceutical emulsions, especially those where fixed oils are emulsified, it will be found that cooling the mixture accelerates the formation of the emul-

sion. This may be explained in part, at least, by the fact that the viscosity of the oil has increased by cooling, and that it is less mobile—hence more readily disrupted and subdivided. In emulsions in which a soap acts as the emulsifying agent, it will be found that heat aids considerably in the formation of the emulsion, but that it is more apt to break afterward. This is often the case in the manufacture of soap liniments. It has been shown that, to produce a satisfactory emulsion, it is essential that the colloidal substance dissolve—break down into an infinitely large number of particles in a manner similar to prolonged grinding—and thus give a surface attraction effect. It is also known that gums usually dissolve or swell up more readily in hot water than in cold. This would lead one to expect quicker emulsification with a hot dispersing phase than with a cold one. If in formula number three the glycerine and water are heated to almost boiling and then added, the emulsion forms more rapidly than when they are added cold. The final emulsion seems to have a more translucent appearance than when it is prepared cold. It should be remembered that there is a change in surface tension with change in temperature.

The point should also be borne in mind that if an emulsion is mixed at a certain temperature above room temperature, there is usually an increase in viscosity due to this drop. It has been previously mentioned that this drop in temperature is almost absolutely essential to a gelatin emulsion in order to obtain permanency. Likewise, the mixtures of homogenized milk and butter fat are placed in a refrigerating room after emulsification, and naturally the emulsion increases in viscosity.

CAUSES OF EMULSION BREAKAGE

Inversely, more knowledge as to the permanency of an emulsion may be obtained by considering those factors that will cause an emulsion to break. The addition of an excess of the dispersing phase invariably breaks an emulsion. If a gum emulsion is diluted with water, it will be found that it begins to separate slowly. This separation is not rapid enough to cause any inconvenience in its use, but it does mean that an attempt to reduce the viscosity of an emulsion by dilution may break its permanency.

The addition of a liquid in which the two liquid phases are soluble will break the emulsion. For instance, if an emulsion of a terpeneless oil is prepared and alcohol is added—the oil is soluble in alcohol and so is water, or the dispersing phase—a break in the emulsion will result. This method of causing an emulsion to break may be valuable in certain technical applications, but it is rarely the cause of a break in gum emulsions. The reason is that alcohol is the only liquid that is likely to be added and the percentage is usually small.

DESTRUCTION OF AGENT

Destruction of the emulsifying agent is often the cause of an emulsion break. It has been previously shown that an emulsifying agent must be present; it is, therefore, only reasonable to suppose that, if this agent is entirely or partially destroyed the emulsion will break. The colloid may be destroyed by precipitation. Soap is sometimes used as the colloid in various lubricating compounds, such as the cutting oils used for machine work. These compounds are diluted with water. In such cases where the water would contain an abnormal amount of calcium salts, calcium soap — which is insoluble — would be formed and the emulsifying agent would be precipitated. If the colloid is an albumen, it is evident that heat will serve to coagulate it. This is an important point if an emulsion is prepared at a relatively high temperature, and if egg white is employed as one of the emulsifiers.

ACTION OF MICRO-ORGANISM

However, where actual destruction of the emulsifying agent does occur, it is usually due to the action of some micro-organism. The majority of the emulsifying agents that have been designated above will act as culture media for various bacteria and moulds. The action of bacteria is evident by a change or discoloration in the medium together with the development of an offensive odor. Any of these products could be preserved with sodium benzoate, but such a practice would hardly be legitimate. There are practically only two bodies that can be added to emulsions which have the desired effect and still meet all food requirements. One is alcohol, and the other is glycerine. Alcohol is undesirable because in many instances the product is being sold as non-alcoholic, and because alcohol is liable to break an emulsion in three distinct ways—tend to dissolve the two phases, or precipitate the gums, or decrease the surface attraction.

ADVANTAGES OF GLYCERINE

Glycerine gives all the advantages of alcohol without any of its undesirable effects. The U. S. Dispensatory notes the preservative action of glycerine. This point in regard to bacterial action may be tested readily by preparing a two per cent solution of powdered milk or of egg albumen in water and also similar solutions in water containing twenty per cent of glycerine. If small amounts of the solutions are exposed to the open air, it will be found that the ones without glycerine curdle and turn to a greenish yellow color, whereas the ones with glycerine do not show an appreciable effect. Bacterial action does not decompose gum solutions as readily as milk or albumen. Furthermore, the result is not as plainly visible to the naked eye. The inhibitory action of glycerine in this case may be judged to a certain extent by the action on moulds. One per cent of gum tragacanth or ten per cent of gum acacia dissolved in water containing from one to twenty per cent of glycerine will act as a medium for some moulds under the proper conditions. This point has been determined by the writer by actual tests in the laboratory. It has also been found that growth of moulds on the surface of emulsion tend to break the emulsion that is underneath for a short distance. Moulds naturally are likely to affect the surface only, whereas bacteria may act throughout the entire body. In tests with egg albumen it has been found a fifty per cent solution of glycerine in water—half glycerine and half water by volume—is needed to prevent separation or a coagulating action.

British Control Prices

UNDER the scheme for the regulation of importations and distribution of essential oils, as outlined in AMERICAN PERFUMER, the British Advisory Committee has issued the first list of prices to consumers in original packages where broken bulk occurs, necessitating re-packing. Agreed margins are additional. The list is given in table below:

Lease-Lend Oils

	£ d
Cold pressed lemon	18.10½
Distilled lemon	14.4
Peppermint	36.4
Grapefruit	18.2
Sassafras	11.1½
Caraway	20.4½
Wormseed (plus purchase tax)	15.0
Cedarwood	3.1
Nutmeg	23.3

Oils from Export Sources

MAXIMUM PRICES FIXED

	£ d
Clove, Zanzibar	5.6
Citronella	5.0
Lime	46.3
Lemongrass	5.6

The prices are applicable to quantities allocated under the scheme. There are, however, still stocks of some of the above oils on the free market (uncontrolled market) at higher figures.

Soap

New War-Time Additives for Soap Manufacture

Due to the lack of raw materials for soap manufacture many additives and replacements have been developed that have proven not only adequate but often superior

by PAUL I. SMITH

THE SOAPER and manufacturer of specialty lines is keenly interested in the use of alternative materials for those in short supply owing to greatly diminished imports or the augmented demands of the vast new armament industries.

Leaving out the basic requirements of the soaper, such as oils and alkalies, there are a large number of subsidiary chemicals, such as perfumes, coloring matters, wetting agents, waxes, solvents, emulsifying agents, antiseptics and various kinds of fillers and abrasives which can no longer be secured by merely writing the suppliers. Materials used over a long period of years are no longer available or else issued on a proportional basis. War-time substitutes or alternatives are freely suggested as means of overcoming supply difficulties for many other soap additives. It is the present intention of the writer to examine one or two of the new materials recommended for use in soap manufacture and to attempt to analyze their general usefulness.

METHYL CELLULOSE ADDITION

Of particular interest is methyl cellulose which, if incorporated into soap, aids its detergent action and produces a more lasting and, therefore, satisfying lather. In cleaning and scouring pastes and powders the retention of pigments and abrasives in dispersed form is also valuable. Relatively small quantities of methyl cellulose, one to two per cent of the weight of pure soap, can effect a definite improvement. This cellulose material is odorless, tasteless, nontoxic and colorless. It is soluble in cold water but insoluble in hot water and in saturated salt solutions. It is stable to alkalies and to dilute acids over a pH range 2-12. Alkalies, including caustic soda, caustic potash and lime water, act to increase the viscosity of methyl cellulose solutions but have no other effect on them. Heating causes most aqueous solutions of this ether to gelatinize, but cooling and stirring transforms them to their original smoothness and fluidity.

The successful employment of methyl cellulose in soap manufacture depends on the choice of a suitable grade of the plastic. The high-viscosity methyl cellulose is the most economical and suitable as it enables a relatively high viscosity to be maintained at a low concentration. Thus a six per cent solution of the 4000 cps. yields a smooth, flowable solution at 20 deg. C. as compared with the requirement of the 15 cps. viscosity type necessitating the use of a 15 per cent solution. For liquid shampoos the use of a little methyl cellulose thickens up the solution without clouding or gumming up and, at the same time, improves its lathering properties. The inclusion of a small proportion of wetting agent in the methyl cellulose solution before mixing with the shampoo can be recommended.

The method of using methyl cellulose in the manufacture of toilet and household soaps is simple and merely consists of weighing out the desired quantity of the cellulose, usually one to two per cent of the weight of pure soap present, wetting it with half the quantity of water at boiling temperature and then stirring in the remainder as cold water. The viscous solution, which should be easily pourable while containing the minimum quantity of water, can then be added to the soap and well mixed in to ensure even distribution throughout the mass.

The following advantages may be claimed for methyl cellulose in soap manufacture:

1. Increases the hardness of the soap;
2. Improves texture, sheen and general appearance;
3. Improves lathering properties;
4. Gives the lather a pleasant smoothness which is a most valuable feature, especially for toilet soaps.

At a time when the tendency is for quality to be degraded owing to the use of unsuitable materials, the employment of cellulose ether is well worth consideration as it tends to cloak the presence of inferior raw materials, and yet is, itself, very economical in use.

Turning now to emulsifying agents which find so many varied applications in soap and allied trades, mention should be made of the polyhydric alcohol esters. Some of these are available for war purposes only, but a good many are still offered for normal manufacturing purposes.

There are four main types of polyhydric alcohol esters:

1. The liquid esters of the emulsifying type;
2. The solid esters of the emulsifying type;
3. The liquid esters of the non-emulsifying type;
4. Solid esters of non-emulsifying type.

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*Title of article in Schimmel Brief #100, July, 1943.

The first and second are the most important for the soap manufacturer; the former because of its ability to form fluid emulsions, such as liquid soaps and soap cleaning compounds; the second because of its ability to give a stable cream or paste form of emulsion, such as shaving cream. In the manufacture of normal toilet soap, the presence of one-half to one per cent suitable polyhydric alcohol ester, such as diethylene glycol mono-laurate serves to improve its general detergency and mask the presence of low detergent soaps due to the enforced use of substitute oils. Diethylene glycol mono-laurate is a light straw colored oily liquid possessing a very faint odor. It is dispersible in water and completely soluble in most solvents. A five per cent solution has a pH 9-9.2, but there is a neutral grade on the market with a pH 7.6-7.9. Where soluble salts are known to be present in relatively large quantities in soap and similar type emulsions, the presence of diethylene glycol mono-laurate helps materially to stabilize such emulsions.

FOAMING COMPOUND TO THE FORE

The soaper has, in the past, been somewhat critical of some of these soap additives. While good and suitable fats could be purchased at economic prices there was no necessity to "gild the lily," but now the situation has radically changed and it is highly desirable to "pep up" the properties of soap and thus improve a lower grade product. Emulsifying, foaming and wetting agents are thus of particular interest. Foaming compounds are now receiving attention by manufacturers catering especially for markets where hard water is common and the need exists for a good lathering soap. The incorporation of one-half per cent brings about a noticeable improvement. By far the most important application of the foaming agent is, of course, in the manufacture of lathering soapless shampoos, and for increasing the foam in tooth pastes, shaving creams, etc. Incidentally these modern foaming agents also act as wetting, penetrating and spreading agents and perform several most useful functions all in one.

In conclusion, mention might be made of glycerin substitutes, particularly sorbitol syrups. These occur naturally in many plants and are stable, heavy liquids which do not crystallize, dry out or volatilize. Commercial forms of hexahydric alcohol are available which have a higher specific gravity, viscosity and refractive index than glycerin, less hygroscopic in moist air and retain their moisture longer than glycerin does in dry air and do not produce acrolein even on prolonged heating.

Uniformity of pH of Soap Additives

IN THE ECONOMY of essential raw materials required for the manufacture of soaps and allied products, careful consideration should be given to the maintenance or standardization of pH. This is of great importance as differences of pH, particularly where such differences are unobserved, may cause expensive modification of processing. The soaper should, therefore, pay attention to pH when substituting one material for another, purchasing new materials or where standard chemicals are being produced by new war-time methods.

It is usual nowadays for manufacturers to list pH at stated concentrations or dispersions in the general specifications of chemicals offered for sale. The range given should be carefully checked in the works laboratory so as to ensure accurate knowledge of the real, as opposed to the supposed condition of the material. Even small differences in pH may be appreciable and result in a deterioration of much needed user properties.

EFFECT OF CHANGES IN pH

Once the conditions of production have been decided on by experience, every effort should be taken to maintain them. Where neutral additives, pH 7.0, were formerly employed, the effect of using those with a pH above that figure must be assessed before general adoption. Taking one concrete example, the pH of a five per cent dispersion of diethylene glycol oleate is 7.6-7.8 and the pH of diethylene glycol (mono) palmitate 9.3-9.5. Both are polyhydric alcohol esters, the first being an oil and the second a wax, and both are of interest to soapers as emulsifiers, either alone or in admixture with other materials, such as wetting agents. The substitution of the palmitate for the oleate might be advantageous for economic reasons but the alkalinity of the finished product would be greatly increased. The diethylene glycol oleate is only just on the alkaline side of true neutrality whereas the palmitate is more alkaline than 0.01/N borax.

It is not always realized that as the pH proceeds towards the left from neutrality, the acidity increases tenfold at each step until at pH 1 the solution is 0.1 molar in hydrogen ions, and as the pH proceeds toward the right from neutrality the alkalinity increases tenfold at each step until at pH 13 the solution is 0.1 molar in hydroxyl ions.

In all suggested formulas, the soaper must pay the closest attention to the pH of all ingredients at usable concentrations. It is worthwhile remembering that at concentrated solutions a certain chemical may be neutral whereas at usable concentrations the pH may be decidedly alkaline. One commercial water soluble resin used for replacing gums in finger-waving solutions and suggested as an additive for soaps has a pH of 6.65 at 90 per cent solution and 8.0 at 1.0 per cent solution. This means a change from the slightly acid side of true neutrality to the slightly less alkaline condition of sodium bicarbonate 0.1/N.

ALKALINES A DISADVANTAGE

In the manufacture of shaving cream, particularly the brushless type, the use of alkaline ingredients is a distinct disadvantage and where ammonium stearate (anhydrous) pH 7.5-7.7 is replaced by sodium and potassium stearates with a pH 8-9 there is liable to be user trouble.

Incidentally, although there is a very excellent anhydrous type of ammonium stearate on the market which is neutral, as above, there is also the paste type which has a pH of 9.5-9.7 for the five per cent aqueous dispersion at 25 deg. C.

Where possible, products should not be employed with too wide a pH range. Thus, one particularly useful emulsifying agent is sometimes offered with a pH range as wide as 8.8-10.2. The minimum figure represents a material slightly more alkaline than a 0.1/N solution of sodium bicarbonate and the maximum a 0.01/N solution of ammonia. It may be that one consignment of the product will have a low pH and the next a high one. Such lack of uniformity causes serious trouble in the plant.

Fats Salvage Drive

Over 150,000,000 pounds of household fats have been salvaged at a promotion cost of less than one-half cent per pound during the past 12 months by American housewives, and the Army and Navy, as the result of a drive conducted by the Committee of the Glycerin and Associated Industries to Salvage Waste Fats, Inc., according to a report recently issued by Roscoe C. Edlund, secretary-treasurer of the committee and manager of the Association of American Soap and Glycerin Producers, Inc.

The drive was conducted in cooperation with the War Production Board and received the support of the Department of Agriculture, the War Food Administration, the Office of War Information and other government agencies.

Glycerin Recovery in Soap Boiling

by J. L. BOYLE

BY far the greater part of the glycerin produced in manufacturing processes is set free from its combination in oils and fats by the operation of soap boiling. In most soap-making factories the oil or fat is saponified by a caustic soda solution and is then given several brine washes to remove glycerol, coloring matter and dirt from the soap, the lyes from each change being sent directly to the glycerin department. The glycerin is sometimes also washed out of the soap by a more complex system whereby successive wash lyes pass from one pan to another in countercurrent fashion; as they move, the proportions of glycerol and impurities in them increase. The advantages of this system are that it gives more complete saponification, and thereby incidentally reduces the loss of glycerol in soap; it reduces evaporation costs by increasing the percentage of glycerol in the glycerin lye, and it gives a purer soap. After the removal of the glycerin the soap is fitted, probably in two stages, and the "nigre" taken off.

GLYCEROL DISTRIBUTION

In considering the distribution of glycerol between the two layers—soap-rich layer and water-rich layer—usually present in a soap kettle at the finish of a change, it has often been assumed that the glycerol does not exert an independent effect, but is equally distributed throughout the water which is present. This is a good working hypothesis and is in general agreement with the results of research workers, who have found, for example, that when curd soap, "nigre" and lye are in equilibrium with one another the ratio of glycerol in the curd soap to glycerol in lye is 30:1. This ratio is independent of the amount of salt present in the system, the hardness or softness of the "grained" soap and of the total quantity of glycerol present.

Kawakami has found that the distribution of glycerol between soap and lye can be expressed by the Freundlich equation for adsorption phenomena:

$$x = kC^n$$

where x is the amount of glycerol per gram of curd soap and C is the concentration of glycerol in the solution. k and n are constants, the values for which depend on the composition of the kettle charge.

GLYCEROL LOSS IN PAN SOAP

The control of glycerol content of the finished soap is an important factor in the overall recovery of glycerol. The main point is to ensure that on each wash the boiling is vigorous enough to give good agitation throughout the pan. The size of the washes is, of course, influenced by their number and by the final volume of glycerin lye desired, but, if at all possible, each wash should be at least equal in bulk to the fats charged.

It should be quite possible with a multi-change system to confine the loss of glycerol in the soap to 5 per cent of the glycerol present in the original fat charge, without the final volume of lye to be evaporated exceeding the volume of fat saponified.

CONTROL OF VOLUME OF LYE

When fewer changes are used, it will be found that a greater volume of lye is required to obtain equal efficiency in glycerol extraction. The volume of lye is determined by the capacity of the evaporators and, in normal times, by the economic balance between cost of evaporation and the price of glycerin. The factory should take precautions to see that over periods of, say, a month the volume of lye per unit of fat saponified is controlled within economic limits. Low figures mean inefficient glycerol extraction; high figures mean increased treatment and evaporating costs. The most common sources of excessive dilution are: the inclusion of settled water from the oil storage; re-fitting the soap; and the use of soap stock that has been excessively diluted.

CONDITION OF LYES

It has already been said that saponification lyes should contain not less than 0.66 per cent free NaOH, in order to ensure a high degree of saponification of the fat charge at this stage. Such lyes can obviously be utilized still further for saponification purposes if there are any high free fatty acid stocks entering the process. Not only is overall alkali consumption reduced, but there is a saving in the acid required later for the treatment of the lyes before they are evaporated.

The cleanliness of lye storage tanks is an important factor in preventing the presence of fermentation products, such as trimethyleneglycol, in the crude glycerin. Therefore, these tanks should be cleaned frequently or, at least, steps taken to avoid the accumulation of mud in them.

Normally, any rosin used is added and saponified before the strong change, but where it is of inferior quality or if it forms a considerable proportion of the soap-making fats the water-soluble rosin acids can be a serious source of impurity in the finished glycerin, and in such cases the rosin may be saponified and washed separately so that the lyes from it do not mix with the glycerin lyes. There is no loss of glycerin thereby, since, of course, rosin is not a glyceride.

CONTENT OF SOAP LYES

There is another important point concerning lyes about to be sent to the glycerin recovery plant. Their salt content should be as low as is consistent with the production of a non-gelling liquor, so as to reduce the quantity of salt that has to be removed in the evaporators. If this is so, it will at the same time assist the efficiency of the saponification change because the density of the lye will be low.

The glycerol content of soap lyes leaving the kettle house varies widely according to the system of washing adopted. The impurities present include sodium chloride, hydroxide and carbonate, soap, fatty acids lower in the series than caprylic acid, albuminous matter and mucilage. When sulfuric acid is used in the purification of the lyes, sodium sulfate will also be present.

If hydrosulfite has been used to bleach the soap, there may be appreciable quantities of sulfur compounds in the lyes. Low-grade oils when used for soap-making are likely to give rise to their own peculiar impurities, which are chiefly oxidation products of the constituent fatty acids; they may be hydroxy acids or aldehydes and ketones which are soluble in water.

The first step in purification is to reduce the quantity of soap in solution, by cooling the lyes, and skimming off the precipitated soap. The next step is the removal of dissolved soaps, fatty acids and mucilaginous matter. Two alternative methods are in common use; namely, ferric chloride with hydrochloric acid treatment or aluminium sulfate with sulfuric acid treatment. The first method has the indirect advantage that no sodium sulfate is produced when the acid is subsequently neutralized. Sodium sulfate is undesirable because it does not have such a strong graining action on soaps as sodium chloride, and consequently, if it is allowed to accumulate in the salt recovered from the evaporation process, it causes trouble when this is returned to the kettle house. The corrosive action of ferric chloride on the metals used in plant construction is, however, a disadvantage. The aluminium sulfate treatment is more expensive than the other, and it requires special care to be

(CONTINUED ON PAGE 69)

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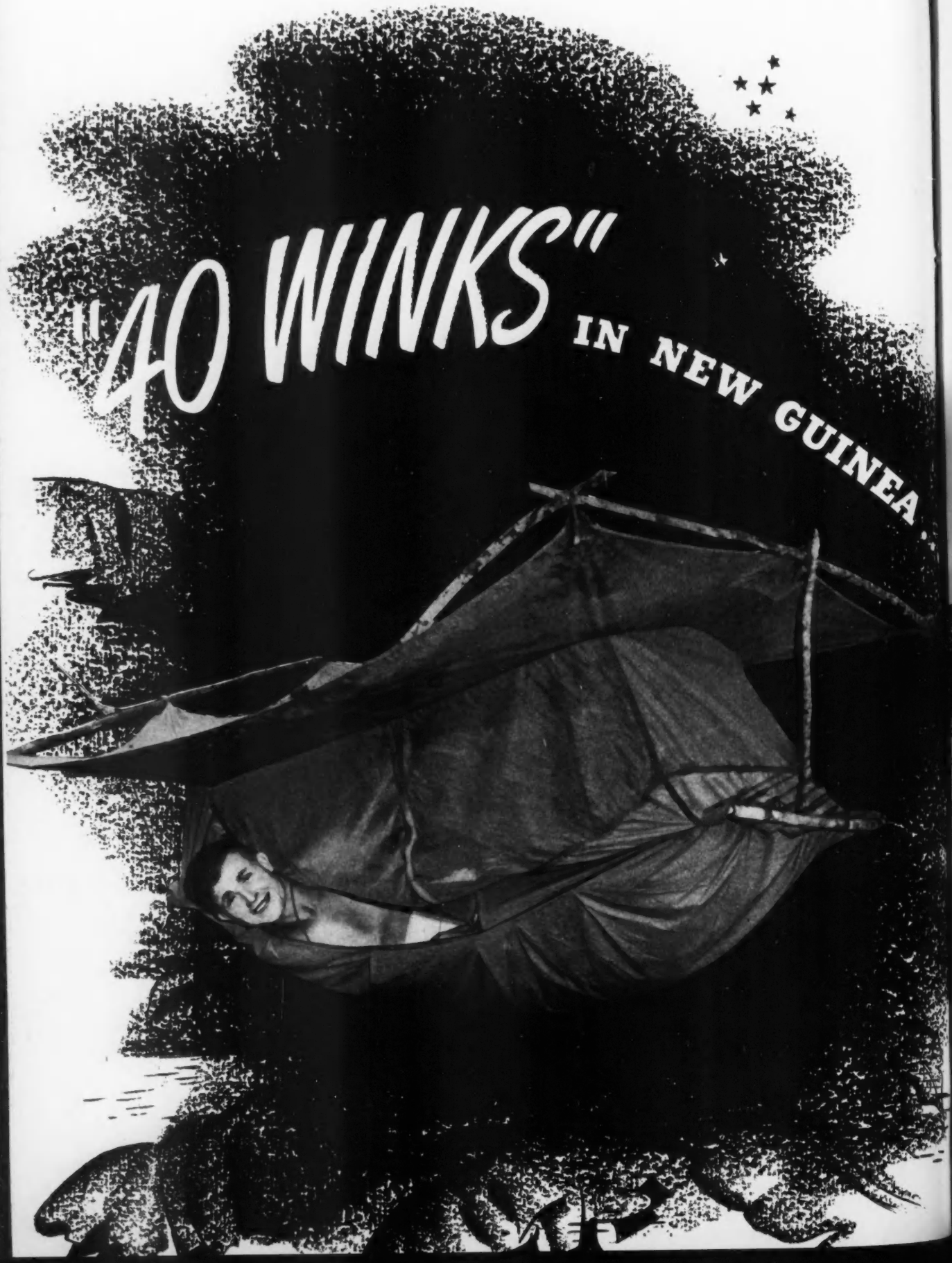
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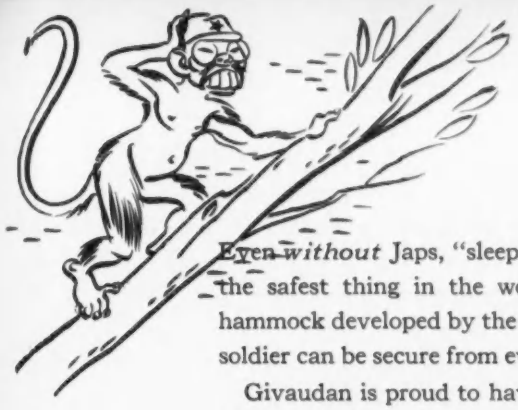

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taken with the recovered salt to ensure that the sulfate to chloride ratio be kept within bounds. But many soapmakers consider that these objections are more than offset by the improvement in the quality of the treated lye.

The general principle is to split the soaps with mineral acid and remove the water-soluble fatty acids as insoluble iron or aluminium soaps. In some cases this is all the treatment that is given, but usually it is only the first stage. The second stage is to precipitate the excess metal hydroxide by addition of alkali and the flocculent precipitate so formed adsorbs the colored mucilage and albuminous material. At this stage the temperature is important because it influences the degree of coagulation of these impurities. The liquor should be heated, but not above 70 deg. C. Since adsorption plays a part in the purification it is good practice to add activated carbon, and this is sometimes possible because the latter is the agent used in the final decolorizing of distilled glycerin. Consequently it is available from the distillation process in a "spent" condition, but still capable of adsorbing impurities from soap lyes. The amount added will, of course, depend on the quantity of "spent" carbon available from the refining process. The lye is filtered after each stage.

COMPLETE PRECIPITATION NEEDED

In the first stage of the treatment the efficiency depends on complete precipitation of the fatty acids and metallic soaps in a physical condition, which allows them to be filtered off completely and without requiring an excessive amount of washing to remove the adhering mother liquor. This is accomplished by controlling the effective acidity of the liquor, preferably by means of a *p*H meter, or alternatively by stipulating the volume of a standard alkali required to reach the phenolphthalein end point, using a fixed volume of the liquor. While soap is present in solution it will exert a buffer action, and so prevent any very rapid change in *p*H during the addition of the acid and the metallic salt. When all the soap has been split there will be a comparatively sudden drop in *p*H. This point of inflection will not be the same for all lyes, but is in the region of *p*H 3. At this point the maximum precipitation of fatty acid soaps has taken place.

The second stage of the treatment is the removal of mucilage and albuminous matter by adsorption on a floc of aluminium or ferric hydroxide. The optimum *p*H range for the coagulation of these metallic hydroxides is around neutrality and the *p*H for this process should therefore be about 7. At this stage it is equally important that there should be sufficient coagulant to remove the impurities. At the same time all the metallic ions must be precipitated so that no metal salts are carried forward into the treated lye. The amount of metallic salt necessary will, obviously, vary according to the quality and nature of the oils and fats from which the lye is derived. It is seldom that the consumption falls outside the limits of 0.1 per cent to 0.3 per cent for aluminium sulfate or 0.075 per cent to 0.25 per cent for ferric chloride. Insufficient addition of the precipitant is likely to result in troubles at a later stage in the refining of the glycerol; priming in the evaporators or stills can be traced to this cause and also dark-colored distilled glycerin, which requires a lengthy bleaching period and even then may not be permanently decolorized. If, instead of following the above "two treat" system, a single treatment with acid and coagulant is given, then the *p*H before filtration has to be a compromise between the optimum for precipitation of insoluble soap and that for adsorption of other impurities.

In order to keep the loss of glycerol during processing at a minimum it is necessary to consider the extent of this loss in the press cakes from the lye treatment. These muds should be water washed, and the wash waters returned to the treatment tanks, until the glycerol being removed is worth less than the cost of evaporating the accompanying water. The loss of glycerol in muds is very variable, depending on the quality of the lye being processed, but it may be as high as 3 per cent.

The treatment known as Garrigue's process is said to give more complete removal of water-soluble fatty acids and their sodium salts. Consequently, the crude glycerin produced from lyes so treated can be distilled at a higher rate and gives a smaller yield of glycerin "foots" in the still. In this process the lye is given a single treatment with aluminium sulfate and sulfuric acid and evaporated to 40 per cent glycerol. This semi-crude is filtered free from salt, acidified, if necessary, and 0.5 per cent barium chloride added to precipitate the barium salts of the water-soluble fatty acids. The preliminary evaporation to semi-crude will certainly result in a lower proportion of these impurities being present in the finished crude glycerin, but is likely to increase evaporation costs.

There have been very few new methods of treating soap lyes, prior to evaporation for glycerol recovery evolved, and it is doubtful if any of them are used in practice. The commonest suggestion is to extract the organic impurities with a medium in which glycerol is insoluble; for this purpose, fatty acids and hydrogenated oils have been advocated. By this treatment the fatty acid impurities would be recovered instead of, as at present, being lost in the press cake.

A recent claim, which is of interest, is that the sludge obtained in recovering the nickel catalyst from hydrogenated fats is superior to aluminium sulfate for the treatment of spent soap lyes. The disposition of this spent nickel catalyst is usually something of a problem for hydrogenation plants, and since they often work in close proximity to a glycerin recovery plant there is a possibility in this claim of a useful outlet for the sludge.—*Mfg. Chem. & Mfg. Perfumer*, Sept. 1943, XIV, 9, p. 275.

More Soap for Civilians and Industry

WHEN THE War Food Administration announced on September 22nd that a program would be inaugurated to bring about a 28 per cent increase in soap production for civilian use the general consensus was that there was plenty of soap to spare and the need for saving was over. This is not the case, as the industrial use of soap is greater than ever before. True, the allocation of fats and oils for the making of civilian soap supplies has been raised from 80 per cent of the 1940-41 use to 90 per cent—this includes household packaged soaps and all types of bar soap — laundries and restaurants, etc., to 110 per cent; and abrasive hand pastes and powders to 150 per cent, still the need for industrial uses requires that we conserve to the utmost.

The rubber crisis alone will call for 100,000,000 pounds of soap a year. While the individual rubber companies have their own manufacturing methods, certain principles governing the use of soap in rubber making are common to nearly all processes.

In addition to the use of soap in rubber there are any number of other industrial uses among which are processing of uniforms, parachutes, tents, truck covers; metal cleaning and protection; leather processing; wire drawing, etc., as well as many indirect uses, chief of which is the manufacture of glycerin.

The outlook, however, for more soap is brighter now, principally because new oil-seed crop harvests are larger than in peace-time and also shipping has improved.

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GIVE ONCE FOR ALL OF THESE TWENTY-SIX AGENCIES

NATIONAL AGENCIES U S O, United Seamen's Service, War Prisoners Aid, Belgian War Relief Society, British War Relief Society, French Relief Fund, Friends of Luxembourg, Greek War Relief Association, Norwegian Relief, Polish War Relief, Queen Wilhelmina Fund, Refugee Relief Trustees, Russian War Relief, United China Relief, United Czechoslovak Relief, United Yugoslav Relief Fund, United States Committee for the Care of European Children.

NEW YORK AGENCIES New York City Defense Recreation Committee, American Women's Voluntary Services, C.D.V.O. – Community Services, English-Speaking Union, New York City Women's Council of the Navy League of the United States, New York City Nursing Council for War Service, Officers Service Committee, Ships' Service Committee, Soldiers and Sailors Club.

THIS SPACE CONTRIBUTED BY ROURE-DUPONT, INC., NEW YORK, N. Y.

Here and There Among Our Friends

▸ Stewart W. Coleman, Mallinckrodt Chemical Works, St. Louis, Mo., is making a tour of South America. He plans to return late in October. During his visit he plans to visit Venezuela, Colombia, Peru, Chile, Argentina and Brazil. Mr. Coleman has been with the Mallinckrodt company since 1939 and served as merchandise manager, general sales manager, and recently was made vice-president in charge of sales.

▸ Dr. John J. Grebe, director, physical research laboratory, Dow Chemical Co., Midland, Mich., has been elected to receive the Chemical Industry Medal for 1943, to be awarded by the American Section of the Society of Chemical Industry. He invented the method of extracting bromine from sea water, and more recently led the successful development of styrene, Saran, a synthetic plastic, and butadiene monomer and polymer production.

▸ Herbert Croen, formerly in charge of the Southern territory for Van Ameringen-Haebler, Inc., 315 Fourth Avenue, New York City, is now a lieutenant colonel in Chemical Warfare Service. He is serving in the European theatre of war.

▸ Martin Schultes, Hewitt Soap Co., New York, N. Y., has returned from Whitefield, N. H., where he enjoyed a well-earned vacation, the third, incidentally, that he has had since 1925. Most of the time was spent in resting, although he did manage to spend some time on the golf links, as was to be expected of the founder of the BIMS.

▸ Nat Otte, secretary of the Drug, Cosmetic and Chemical Credit Men's Ass'n, New York, N. Y., is back from a tour of the mid-west which included calls on friends in the industry in Chicago and St. Louis.

▸ Irving Bennett, sales manager of Compagnie Parento, Inc., New York, N. Y., spent his vaction in Utah and before returning East, visited friends in Los Angeles, Calif.

▸ A. S. Lester, chief house executive for the Western Wholesale Division, Los Angeles, of McKesson & Robbins, Inc., attended the National Wholesale Druggists Ass'n convention in New York City the first week in October while on a business trip East.

▸ Archie H. Stone, chemicals purchasing agent for the Brunswig Drug Co., Los Angeles, has the distinction of being the oldest person in point of service employed by the company, it was revealed last month. The English-born Mr. Stone is now in his 47th year of service and has never been associated with another firm.

▸ Percy C. Magnus, Magnus, Mabee & Reynard, Inc., essential oil and aromatic chemicals, New York, was honored recently by the presentation of his portrait to the New York Board of Trade, of which Mr. Magnus is chairman of the

Portrait of Percy C. Magnus

board. The presentation ceremonies were held on Sept. 15 at the Waldorf-Astoria Hotel. The portrait is the work of the eminent artist, Edmund McGrath, and its presentation evidenced the esteem the members of the board foster for Mr. Magnus and his untiring service to the organization.

▸ J. L. Hindle, vice-president of Standard Synthetics, Inc., New York, N. Y., has returned from a business trip to the Pacific Coast. With H. Furman and B. Borders, agents of Standard Synthetics on the West Coast, Mr. Hindle visited business friends in San Francisco and Oakland. Labor conditions seem to be the worst problem in this section, also an acute shortage of bottles is a great handicap.

In Los Angeles Mr. Hindle found business very active. Later, he investigated the situation on citrus oils production in Southern California.

▸ Sydney Friend, secretary of Van Ameringen-Haebler Company, has just returned from a two-weeks' vacation in the Poconos. Accompanying him on this trip was Mrs. Friend. Previous to the vacation Mr. Friend had had a slight illness which this short vacation has completely cured; in fact, he tells us that he is "feeling grand."

▸ Peter Kyle Sheffield, son of W. Kyle Sheffield, vice-president of New England Collapsible Tube Co., has received his promotion and is now a captain in the Army Air Corps. He is still an instructor stationed at Stamford, Tex.

▸ Burton T. Bush, president and founder of Bush Aromatics, Inc. and Bush Pan-American, Inc., New York, N. Y., has received the certificate of his appointment to the War Production Board. His special work is with the Synthetic Rubber Division. Mr. Bush is one of the best known men in the essential oil industry and his appointment is regarded as fortunate in view of his long and broad experience.

▸ Sergeant Julius Axman, formerly with Standard Synthetics, Inc., New York, N. Y., has been awarded the medal of the Silver Star for brave and brilliant work in Sicily. An experienced paratrooper or "Master Jump," Sgt. Axman was among the first Americans to visit the lemon groves of Sicily which amazed him by their extent.

The citation for the medal mentioned "Extraordinary leadership against the enemy." Sgt. Axman jumped first and directed where his men should land in safety though being shot at. These paratroopers then attacked and cleaned out a small town and stormed and silenced pillboxes.

▸ W. Harvey Neil, manager and one of the owners of the Neil Flavor Laboratory, Los Angeles, and John A. Blodgett, sales staff, have returned from a business tour which took them to various centers, including Salt Lake City, Denver, Des Moines, Albuquerque, N. M., and Chicago. Their principal stop was in Chicago, where they conferred with the Chicago Quartermaster Depot Research Laboratory personnel.

▸ In the September issue of the AMERICAN PERFUMER, we advised our friends in the trade that Dr. Samuel Iserman, president of Van Dyk & Co., was planning to *retire* to his ranch at Tucson. This wording was most unfortunate as Dr. Iserman was planning on making his usual visit to his ranch before returning to his office.

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JOHN POWELL & CO.
116 East 32nd Street,
New York City.

New Products, Ideas and Processes

Laminated fibre strapping

A new laminated fibre strapping to take the place of steel strapping in binding corrugated shipping containers is offered by A. J. Gerrard & Co.

Waterproof label paper

Labels will stick to products and packages in all kinds of weather if Alcoceal label paper is used, according to the McLaurin-Jones Co. It is coated for application either with heat or with denatured alcohol.

Washcloth with invisible soap

An invisible soap washcloth with a paper or a cloth base is a recent addition to Charles F. Hubbs & Co. products The paper which is non-disintegrating, is impregnated with the soap, dried and when water is added it yields cleansing suds. The cloth base is similar; its chief advantage being that it can be used more vigorously.

These papers impregnated with soap can be developed in various colors by tinting the soap and also scented with any odor desired. They can also be imprinted with company name, etc.

K.A.T. water conditioner

Laboratory water stills can now be protected from scale deposits, from corrosion, and a purer distillate obtained by use of K.A.T. as a water conditioner, a colloidal solution. According to Eimer and Amend, New York, K.A.T. is an anti-scale, anti-foaming and anti-corrosion agent; it forms a protective coating on the interior of the still and at the same time sheathes the impurities in the water to form a sludge easily removed by flushing.

This water conditioner is easily introduced to any of the laboratory stills now in use.

New fire shield

For fighting severe fires out in the open, in tank, farm, refinery, etc., the new fire shield of the American-LaFrance-Foamite Corp. is ruggedly built for hard, tough service, of sheet steel, reinforced with strong angle irons.

Plating plastics, glass, etc.

A process has been developed by Precision Paper Tube Co., by which plastics, glass or any non-conductor is perfectly plated with any of the plating metals, according to the company advices. The plating goes on the plastics as perfectly and as permanently as the best in any plated metal. Convex and concave surfaces, convolutions, corners and recesses are as thoroughly plated as flat or simple round surfaces. The plating is permanent, does not crack, chip, nor peel off in long and severe service.

Combination closure

A new semi-plastic closure or cap featuring a purely functional design and having "eye" appeal in the packaging of foods, drugs, etc., is a product of the Closure Corp. Three types have been designed; the threaded or screw-type; the snap-on type; and the slip-on or friction-fit type.

NIPA 49 a rancid preventative

Nipa 49, a product of NIPA Laboratories, Ltd., is a powerful scientifically practical antioxidant for pharmaceutical, medical, cosmetic and technical purposes. Neutral as an ester in a chemical sense and non-toxic, it finds application in preventing oils, fats, animal and vegetable, fatty and oily ointments, emulsions, creams and the like from becoming rancid.

Leakproof self-sealing closure

The idea for this new leak-proof self-sealing closure, "Lok-Lid," came from shotgun shell. The same type crimper seals both. Load of shotgun shell supports paper retaining disc; inner tube of "Lok-Lid" can corresponds to shotgun shell load in holding disc.

This lid is a liquid-tight, self-sealing closure for paperboard cans. Closure is free from critical metal and requires no glue. This invention has been tried out satisfactorily by packers.

Packaged fire hose

As a precaution against tampering with fire extinguishers in defense plants and possible sabotage, a "safety seal" envelope for fire extinguisher hose has been developed by F. Fredriksen, Fredriksen Service Co.

The envelope has die-cut ring at top for attaching to extinguisher. Standard wire seal is fastened around neck of envelope and projecting part of extinguisher. Broken seal would immediately uncover tampering. Plugging or otherwise damaging hose or nozzle is prevented by stitching as well as gluing bottom and side seams of envelope. Front of envelope has printed charts, convenient for recharge and inspection records. Company is already in production on this product.

Protective cream for burns

A new cream developed by the Naval Medical Institute which protects the skin against heat of more than 1832 deg. F. is being used by the fleet where flash burns have ranked second only to gun-shot and shell fragmentation wounds as a cause of casualties.

The cream protects the skin against a flash burn of more than 1000 deg. C.; may be applied to the exposed surfaces of the body in two minutes or less; is effective for six to eight hours and may be removed easily with soap and water; has no toxic or allergic effects.

It was emphasized that the cream is not intended to displace, but merely to supplement such anti-flash equipment as hood, facemask and gloves.

Announcements

Schimmel & Co., Inc., price List P

Schimmel & Co., Inc., New York, has issued its Price List for Perfume Specialities. This catalog is complete in its listings and is very logically subdivided into osmodors, fixoresins, animal fixatives, oakmoss substitutes, perfume compounds and bases, Maya bouquets, flavor compounds, sun screens, perfume compounds for fly sprays, water soluble perfumes, etc.

Neumann-Buslee & Wolfe, Inc., prices

Neumann-Buslee & Wolfe, Inc., has issued its wholesale price list including essential oils, aromatic chemicals, sundries, gums and flavoring specialities.

P & G "Vital for Victory"

Procter & Gamble Co. has issued its booklet, "Vital for Victory." This very striking presentation shows the use of Procter & Gamble products on three fronts, the production front, the home front and the fighting front.

The various uses of soap, glycerine, edible oils, fatty acids and oils—inedible—cotton cellulose, soya-beans and peanuts, cottonseed, all are graphically depicted in this copiously illustrated and beautifully designed booklet. All these products mentioned above are directly or indirectly connected with the war effort.

Early diagnosis of dermatitis

The Pioneer Rubber Co. has issued a pamphlet in which it tells the importance of early diagnosis of dermatitis of workers' hands. The work is the result of considerable research work by the company's chief chemist, L. G. Pagel, and emphasizes the need for the use of proper gloves for protection.

Fashioned Like a Jewel

GRATEFUL FOR THE ENTHUSIASTIC RESPONSE OF PURVEYORS AND PUBLIC EVERYWHERE WE CONSTANTLY SEEK TO MAKE OUR PRODUCTS BETTER AND BETTER. KEEPING THIS OBJECTIVE ALWAYS IN MIND, WE MAINTAIN OUR STANDARD OF . . . .

THE MOST PERFECT ALL PLASTIC LIPSTICK CONTAINER IN THE WORLD

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FROM M M & R's hard-working laboratories have come a large and varied group of scientifically produced replacements for currently high-priced and hard-to-get essential oils, perfuming and flavoring materials. They are rendering meritorious service and have won the plaudits of numerous users.

Many of these new products like *Cam-O-Sass M M & R (replacement for Oil Sassafras Artificial), Citronella Replacement #21 M M & R, Imitation Oil Cassia M M & R, Oil Rose Geranium Replacement M M & R, Oil Lemongrass Replacement #619 M M & R, Lavender Oil Replacement #30 M M & R and Annol M M & R (replacement for Oil Anise in technical products)* are going to earn permanent berths because they are doing a remarkable job now; *will continue to do a more economical job* than the "regulars."

Write for Replacement Pamphlet

This new listing of M M & R Replacements will serve as a ready reference. Our technical department will be happy to furnish detailed recommendations.

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895... ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

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San Francisco: Braun, Knecht, Heimann Co. • Los Angeles: Braun Corp. • Seattle, Portland, Spokane: Van Waters & Rogers • Toronto: Richardson Agencies

Our Washington Correspondence Reports to You

by ARNOLD KRUCKMAN

AMONG THE MANY items that make up the news of live interest to the industry the most happy probably is that you will be able to get relatively abundant glycerin the rest of the year. By the time this is published the Order will be out permitting you to obtain 90 per cent of the volume of glycerin you used in 1940. The method of supply still remains under the existing system of allocation. You make your application to the Fats and Oils Branch, Food Distribution Administration, Washington 25, D. C., on PD-600, or whatever the present terminology is for PD-600. It is now one of the WPB prefixed forms. The changes in the exact designation of these forms are so frequent that it would serve no good purpose to give you the present numeral classification. You may find out by applying to your local WPB or WFA office for the current equivalent of the PD-600. The WPB or WFA people will know what to give you.

In an earlier release War Food Administration cautiously announced only a very small quantity of glycerin would be available for distribution on October 1. WFA specifically announced the beneficiaries of the relaxation would particularly be manufacturers of dentifrices, shaving creams and flavors. The field now seems considerably broadened. This is the first release of supplies of glycerin since March. It is explained that inventories now are at satisfactory levels because shipping conditions have signally improved, and much more soap will be produced for the synthetic rubber program. Special stress, however, is placed on the fact that fats are still urgently needed, and that any abrupt dive in the supply of fats and oils will again dry up the supply of glycerin.

CLOSURE OUTLOOK BETTER

The other good news is that closures seem to be in a more hopeful position. The brewers have been collecting cans and salvaging the material and cutting it up and making caps and other necessary supplies. They find they have far more material than they need. Under M-104 and M-325 this excess material is available for others who can make use of it. It is expected this will be particularly welcome to lipstick manufacturers, and to all those who can use a larger supply of metal closures. The fly in the ointment is the fact that fabricators of the closures will have to make some adjustments in their machinery, since the usual closure is made of standard-sized metal sheets and the machines are geared to handle these sheets. The material provided by the brewers comes in odd sizes, and the adjustments on the machines must be made to handle these irregular pieces. It seems to be regarded as assured, however, that this problem will be solved. To secure a supply of the metal from the brewers in order that your fabricator may make containers and closures you must write a letter of application to the Administrator of Salvage Division, WPB, and the Administrator may then issue the necessary permission to the brewers to ship the metal to your fabricator.

NO LANOLIN FOR COSMETICS

It is news, albeit bad news, that lanolin now has been absolutely eliminated from the market for any purpose except military and lend-lease needs. Apparently lanolin is out for an indefinite period so far as your industry is concerned.

CONTAINER SITUATION BLACK

The word also is that the order holding the supply of glass containers to 65 per cent of the quantity used in 1942 has been extended until January, 1944. It is quite within the range of possibilities that the order will again be extended at that time. They think here hardships will now become more apparent in the industry because the industry has been using its accumulated inventories of glass contaners, and the inventories have probably dwindled to almost nothing. There is also a rapidly developing pinch in the supply of corrugated paper shipping containers, and no relief is in sight.

RELIEF FROM PEPPERMINT ORDER

It will be good news to learn that appeals for relief from the limitation of 30 per cent use of peppermint oil, as required by the existing 100 per cent freeze order, are processed with extraordinary speed by the WFA Essential Oils and Flavors Section administered by Dr. A. L. Kalish. There have been a number of such appeals and in every case, where the need was demonstrable and obviously genuine, the relief was prompt. At this writing, the last day in September, about one per cent of the industry has asked for relief. In every case it is made very clear the relief is given with the specific understanding that the additional quantity granted for immediate use is simply a loan which must be repaid out of the allocation which eventually will be made by WFA. Returns of the reports of quantities held by manufacturers, brokers, dealers and producers were almost nil until Sept. 29. Apparently those holding stocks of peppermint oil waited until the last moment to file their reports. At the end of September the majority of those compelled to report have filed. It is never practicable or even possible to prognosticate when things will happen in government. But there is every hope the final allocation will be announced by Nov. 1, unless some unusual government interference occurs.

MOST COMMENT FROM USERS

Meanwhile, it is interesting to learn that little comment has been registered by the selling section of the essential oil industry. Most of the comment has come from users, such as the chewing gum industry and the pharmaceutical users. There are many manifestations of distressed irritation from such sources. There are some disturbed complaints from the farmers, who, incidentally, in some sections and in some instances, appear to have managed a highly concentrated sales campaign at $7 per pound shortly before the freeze order was issued. It is reported here substantial sales were negotiated at this price.

The Order as finally issued, MPR 472, fixes grower-producer prices at $5.50 per pound for peppermint and $3.50 for oil of peppermint. Dealers' prices for peppermint were set at $6 per pound, and oil of spearmint at $4 per pound. USP redistilled oil of peppermint was priced at $6.35 per pound. "Fractionated oils and fancy grades redistilled by the trade are continued un-

der the provisions of the General Maximum Price Regulation." The release which accompanied the announcement is one of the most detailed discussions and one of the most interesting ever issued with an order by OPA. It declares the new ceilings are above the average price for 1942 which the law indicates as the yardstick year for computation of price fixing. It is pointed out that Department of Agriculture reported the 1942 prices as $4.83 for peppermint oil and $2.90 for spearmint. Agriculture, which is WFA, computed parity prices as $3.30 for peppermint and $2.43 for spearmint. Increased labor costs and increased costs brought about by drought and flood conditions and similar circumstances are regarded as responsible for reduction in acreage and yield, estimated at 40 to 50 per cent.

The order became effective on Sept. 30. In general it is reported as representing an increase of 10 per cent over the GMPR ceilings in effect previously. Robert Dupree, new head of the OPA section which deals with the industry, worked out some of the conclusions reflected in the order after careful consultation with the corresponding officials in WFA. All problems directly or indirectly affecting food are first cleared with WFA Commodities Specialties Branch. The powerful influence of WFA in all the business of your industry is expanding constantly.

WFA TO DETERMINE PRICE CEILING

The present problem of the price ceiling on peppermint which is not deemed settled, even here, undoubtedly will be affected by future activities of WFA. It is generally assumed the first real test will come when the WFA order is issued making peppermint oil allocations. It will then become clearer what will be sold and who will sell. It is quite apparent also Dr. Kalish and his associates will have much to do with the business of the board or committee already created by the Department of State which will dominate the buying of the things we import from the countries wrested from the enemy. The name and personnel of this very hush-hush body is not yet known. Most of the actual business is conducted through U. S. Commercial Corporation. Food, and materials allied to food, which undoubtedly will include all essential oils, will strain through WFA. It is logical to assume its council will be the dominating influence. It is expected virtually to do the buying abroad and supervise the selling here. How much of the materials available for import from occupied countries will come to the United States depends upon the decisions reached by the United Nations Relief and Rehabilitation Administration which recently was organized as an offspring of the newly reorganized State Department. Undoubtedly the new Under Secretary, Mr. Stettinius, will be the head of this extraordinary body, as director general. He is qualified by his long experience as head of Lend-Lease. Various government units hitherto functioning along parallel lines are expected to be subordinate to the new allied agency. They have mentioned here agencies, such as the Office of Foreign Relief and Rehabilitation Operations, OEW, Office of Inter-American Affairs, Lend-Lease and similar units.

LEND-LEASE EXPORT OF OILS

Latest Department of Agriculture reports show Lend-Lease has sent abroad this year 2,805,386 pounds concentrated lemon juice; 13,144,320 pounds grapefruit and orange pulp; 152,109 pounds lemon oil; 1,399,368 pounds orange juice; 37,188 pounds miscellaneous essential oils; 136,155 pounds peppermint oil; and approximately 60,000 pounds of allspice, anise, bay leaves, cardamom, cinnamon, cloves, coriander, pepper and miscellaneous spices.

EXPORT CONTROLS

Modifications in export controls to 16 Latin American countries went into effect Oct. 1. Goods in free supply, hitherto exportable under "general license" to Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela, Mexico and Cuba may be exported without previously necessary war-time control measures. Details may be obtained from OEW Current Export Bulletin No. 124.

ALCOHOL SUPPLY SHRINKING

Alcohol is shrinking in production, according to OPA, which permitted plants east of the Rockies to add 2½ cents per gallon as profit to production by plants which make over 1,500,000 gallons. There is said to have been difficulty in converting from molasses to grain alcohol production, and volume decreased.

OTHER PRICE CEILINGS

Methyl salicylate, used as flavoring material in beverages and candies has been placed under dollars-and-cents ceilings by OPA. Resale prices, 25 pounds or more, in lots up to 500 pounds, range from 40 cents to 81 cents; in quantities less than 25 pounds, resale prices range from 52 cents to 92 cents. The ceilings were established because it was found some suppliers were charging as high as $1.35 per pound.

Price ceilings are to be placed on talc, pyrophyllite and ground soapstone used in cosmetics, after the subject has been considered by an Industry Advisory Committee.

PURCHASERS RECLASSED

Packaged cosmetics manufacturers may now charge new classes of purchasers different prices after applying to OPA for determination of maximum prices for purchasers who were not brought under GMPR pricing. Resellers may in similar circumstances use the "comparable commodity" provisions for pricing found in Section 3 (a) of GMPR. The details are defined in the Amendments to MPR 392, published Sept. 9. Copies may be obtained at the nearest OPA office.

PRICE CEILING ON LANOLIN

Lanolin was placed under dollars-and-cents price ceilings Sept. 29. Both USP anhydrous and hydrous lanolin are covered by the new measure, MPR 474. The maximum prices reflect a 15 per cent mark-up over costs on large quantity sales and 30 per cent mark-up on two smaller container sizes. The prices are imposed on wholesalers. Retail sales are seldom over the counter, as such. Therefore, it it considered impractical to specify ceilings for retailers' sales. The regulation covers half the total amount of lanolin sold for drugs and cosmetics. The rest is sold directly by producers to drug and cosmetic manufacturers under ceilings established by Regulation 53. The total annual sales aggregate approximately $4,500,000.

MISCELLANEOUS

In the fats and oils bracket it is interesting to report we delivered 264,000,000 pounds to the Soviets this year, according to WFA report. And again in this bracket, War Labor Board reports it denied the request of the United Soap, Glycerin and Edible Oil Workers, AFL, for an increase of 10 cents an hour for 750 workers employed at the Hammond, Ind., plant of Lever Brothers Co. The workers made, January 1, 1943, hourly earnings averaging 87.8 cents, and since that time have been given increases totaling 13.4 cents an hour, bringing their hourly wages to $1.012 per hour. WLB considered this was sufficient to bring them in line with the "Little Steel" formula. Total production of domestic fats and oils in 1943 are reported 10,900,000,000 pounds, 1,000,000,000 more than last year.

ADVERTISEMENT—*This entire page is a paid advertisement.* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

October ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1943

Anhydrous Ethanol Finds New Uses in Vital War Jobs

Expanding Future Predicted for Product Pioneered by U.S.I.

For years, anhydrous ethanol has been used in the making of dyes, pharmaceuticals, anti-freeze (Super Pyro) and as a solvent in resin and nitrocellulose compositions.

War in the tropics, and the urgent need for large quantities of anti-malarials, have changed this picture radically. For both quinacrine (atebrin) and plasmoquin, the now-famous substitutes for quinine, are dependent on anhydrous alcohol at certain stages in their production. To visualize the magnitude of this one use alone, it is necessary only to realize that this country today is producing quinacrine at the rate of 1,200,000,000 tablets per year — the equivalent of 50 per cent more than the world's total prewar supply of quinine.

Synthesis of Sulfa Drugs

Not only in the manufacture of anti-malarial drugs is anhydrous alcohol finding new uses. Many chemical reactions which cannot be carried out in 190 proof ethanol become practical in anhydrous. Such reactions, for example, are currently being used in the synthesis of the newer sulfa drugs, sulfadiazene, sulfamerizine, and sulfamethazine. They have served, too, in greatly simplifying the production of vitamins B_1 and B_6.

As a solvent, anhydrous ethanol is acquiring importance in still other fields. An interesting new process for soap manufacture, in which the recovery of glycerol is greatly simplified, uses anhydrous alcohol. This helps satisfy the huge demand for glycerol in munitions and protective-coatings manufacture. Anhydrous alcohol is essential as a solvent to compensate for the water content of the low-proof ethanol used in wetting down SS nitrocellulose.

Many, if not all, of these uses for anhydrous ethanol will continue to grow with the coming of peace. Others will undoubtedly appear. All will amply justify U.S.I.'s pioneering effort, back in 1922, in introducing commercial anhydrous alcohol to the American market at a price only slightly higher than that of regular 190 proof.

What's in a Name?

Four different spellings of "Atebrin" currently appear in the literature about this new anti-malarial. "Atebrin" say both the American and British *Chemical Abstracts*. "Atebrine" says *Thorpe's Dictionary of Applied Chemistry*. "Atabrin" says *The Merck Index*. "Atabrine" says the *United States Dispensary*. On top of this, chemists call it quinacrine hydrochloride — or 4 amino-1-diethyl amino pentane 3-chloro-7-methoxy-acridone, for short.

Resin-Improved Red Lead Primer Protects Billions in War Equipment

Paint for Ships and Military Equipment of "Compelling Importance" in War, Says Navy

An unseen protector for America's great Maritime fleet, as well as for other implements of war valued in billions, has gone on duty as a result of an important improvement in paint formulation using alkyd resins. Today's *red lead primer*, on an alkyd base, widely used as an under coat for ships and other metal surfaces exposed to corrosive conditions, is saving extra man-hours as well as "saving-the-surface."

From U.S.I.'s Stroock & Wittenberg Division has come much of the resin progress raising the protective qualities of red lead primer, as well as other naval and military paints. S&W "Aroplaz 1328,"* for example, is a widely used alkyd constituent of paints meeting Army, Navy and Maritime specifications. In the Maritime primer (Specification MC52A1), it provides durability, flexibility and dull sheen. Sudden temperature changes, salt water spray, and even deformation of the surface may be encountered without opening cracks in the coating. The bond to the base metal is unusually tenacious. At the same time, fast drying is not sacrificed . . . a vitally important factor in today's shipbuilding.

Finish Coat for Battleships

The widely-used Navy finish coat (Specification 52-R-13) is another important paint to which "Aroplaz" gives great durability. Used on both outside and inside surfaces, it has the good brushability and drying characteristics needed where time is at a premium. Retention of the exact shade of color selected for maximum safety of the ship and non-reactivity with the necessary pigments, is a further strong point for "Aroplaz" resins.

(*Continued on next page*)

* Reg. U. S. Pat. Off.

New Equipment Design Speeds Vitamin Extraction

Fish oils are first saponified with aqueous ethanol-caustic soda. The vitamin-containing unsaponifiable fraction is then extracted countercurrent with an immiscible solvent $(CH_2Cl)_2$, in a specially-designed cylindrical vessel. The vessel, described in a British Patent is fitted with a revolving shaft carrying partly semicircular, partly semielliptical baffle discs. This affords small clearance with the vessel on one side, wider clearance on the other. The discs are staggered so that solvent entering at the bottom is forced to follow a tortuous path up through the soap solution.

New Mothproofing Agent

A patent has been granted for a mothproofing composition consisting of a solution of a guanidine salt, with *p*-tert-amylphenol or a fatty acid in an organic solvent. Solubility of the salt is enhanced by the use of a substance such as *n*-butyl alcohol.

To protect America's "bridge of ships" against the ravages of drenching rains, salt spray and scorching sun, shipyards are using thousands of gallons of tenacious new red lead primer formulated with S&W resins.

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October ★ **U.S.I. CHEMICAL NEWS** ★ 1943

Improved Red Lead Primer

(Continued from preceding page)

Resins Improve Duck Coating

In still another application, S&W resins find themselves close to the front lines as a constituent of a protective coating for cotton duck (meeting Jeffersonville Q.D. Specification 242). In the tropics, particularly, where rain, sun, humid heat and mold growth would mean quick decay for unprotected canvas, this coating with a combination alkyd-hard resin base has a vital job to do on tents, hospital sidewalls, and the like. An important characteristic of the resin combination (Aroplaz-Arochem) is its compatability with chlorinated paraffin, which is included in the formula to keep the coating non-flammable.

One measure of the importance of paints in the war — and of the production demands for resins being made on the Stroock & Wittenberg Division of U.S.I. — can be obtained from recent figures released by the U. S. Navy Department, which state that some 50,000 carloads of paint are used on American men-of-war alone! The paint for one battleship would cover a fence 5 feet high — 273 *miles* long!

Foresight in the expansion of facilities for resin manufacture by U.S.I. has been a highly important factor in increasing the volume as well as the protective quality of paints for war. The highly specialized job of producing alkyds by combining phthalic anhydride, a fatty acid or an oil and glycerine is being carried out continuously under complete automatic control at one modern plant. For the production of ester gums, maleics and other resins in which natural rosin is a raw material, another new U.S.I. plant operates day and night in the heart of the Southern Pine country, with the wood rosin itself piped in from an adjacent producer.

Military paints, ranging all the way from stencil paint to spar varnish — from airplane "dope" to the familiar lusterless olive drab which marks the "jeep" the world over — are being formulated with one or more of S&W's six types of resins. These are:

"S&W" ESTER GUM — all types.

CONGO GUM — raw, fused and esterified.

AROPLAZ — alkyds.

AROFENE — pure phenolics.

AROCHEM — modified types.

NATURAL RESINS — all standard grades.

Granulated Soaps Kept Dust-Free by Spray Treatment

As granulated soaps lose moisture, the individual granules tend to break down into a fine dust which is annoying to the user. This difficulty is overcome by spraying the granulated soap with small quantities of certain polyhydric alcohols or other materials which act as hygroscopic agents and binders, according to a British Patent recently issued to a prominent soap manufacturer.

The spray must be carefully applied so as to hold the individual granules together without causing lumping. A material which is non-soluble in the soaps is also of advantage, as it tends to coat the surface of each granule rather than being absorbed to a point where increased quantities are required.

Agents specifically mentioned are glycerol, ethylene glycol, diethylene glycol, sorbitol and mannitol. Also alkyl phosphates ($MRHPO_4$) in which M is an alkali metal and R an alkyl group.

A New Oxidant for Vat and Sulphur Dyes

Sodium chlorite, a new oxidizing agent used for bleaching cotton and other cellulose fibres, is reported to be valuable in developing vat and sulphur dyes.

Dyes are first reduced with sodium hydrosulfite to make them soluble. After absorption by the fabric, they must be oxidized to restore their original color. Chlorite is applied either in hot sodium bicarbonate or acetic acid solution. The chlorite is reduced to common salt which is easily removed.

The new process is said to speed up output of khaki, olive-drab and other cotton goods as much as 30 per cent, to simplify reproduction of colors, to produce more absorbent, softer, better-rinsing goods.

Non-Toxic Treatment For Insulin Hypoglycemia

Acetopyruvic acid, prepared from ethyl sodium acetone oxalate, is reported to provide protection against death by insulin hypoglycemia. Its action suggests a possible conversion to glucose during a critical demand on blood sugar. The drug is said to be non-toxic in moderate doses and easily absorbed from the alimentary canal.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

Bonding of steel or light alloys, with a strength exceeding riveting, is said to be possible with a new synthetic resin adhesive. The process is also said to be effective in bonding metals to dissimilar products such as wood, plastics, and leather. **(No. 739)**

U S I

A mastic flooring material, especially suitable for areas where static electricity is a hazard, is announced. Easily applied over present floors, it is reported to provide an electrically-conductive surface which is easily cleaned, resistant to hard wear and heavy wheel loads. **(No. 740)**

U S I

A potash fish oil soap, available in limited quantities, is suggested as a carrier for insecticides or for use in commercial soap manufacture. **(No. 741)**

U S I

A new preservative for pharmaceutical and cosmetic products, reported to combine high efficiency in low concentration with extreme solubility in water, is announced. The preservative is said to be colorless and odorless. The manufacturer also announces another new preservative for products containing oils, fats, and alcohols. **(No. 742)**

U S I

A new paint spray gun, in which critical materials are limited to the air nozzle and needle valve, is announced. Nozzle design is said to prevent clogging, clean easily, and permit pattern adjustment from round to flat. **(No. 743)**

U S I

A new non-rubber sealing tape, stated to be both waterproof and non-toxic, is being recommended for sealing food, medicine and other consumer goods packages. **(No. 744)**

U S I

A new alcohol, (hydroabietyl) is now being offered as a paper coating, as a holding agent for china wood oil in varnish, and as a wetting agent for dispersing pigments in vehicles or during grinding. The new alcohol is valuable also as a plasticizer for protein film formers. **(No. 745)**

U S I

A luminous tape has been developed for indicating the location of aisles, machines and other important points during blackouts or power failures. The tape is reactivated, after service in the dark, by exposure to light from ordinary incandescent lamps. **(No. 746)**

U S I

Combustion tests, at temperatures up to 1000°F., are facilitated by a new electrically-heated, multiple-unit furnace. Originally designed for carbon determinations on gasoline cracking catalysts, the furnace is said to be adaptable for many other organic combustions. **(No. 747)**

U S I

A new boiler coating is offered to provide greater protection against both corrosion and fungus growth. The coating is said to retain its plasticity, and resistance to "craze," indefinitely. **(No. 748)**

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OXALIC ESTERS
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Diethyl Oxalate

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Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
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Diethyl Carbonate
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Acetoacet-ortho-anisidide
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War Check List for Sept.—Government Regulations

Digest of Federal rules and regulations on price control, allocations and other regulatory measures of cosmetic, soap and flavoring industries issued or proposed during the past month

WFA in order FDO 81 freezes peppermint oil as of Sept. 13

FDO 81 requires that every person who owns, controls, or has in his possession oil of peppermint on the effective date (Sept. 13) or any time subsequent thereto to set aside promptly 100 per cent of said oil of peppermint for sale and delivery to the FDA, WFA, including but not restricted to the Federal Surplus Commodities Corp. or to any person or agency designated by the director, provided that any person who used peppermint oil during the year 1941 in the manufacture of any product may during the corresponding portion of the year 1943 use 30 per cent of the quantity of oil of peppermint used by him during such corresponding period in 1941.

Limitation Order L-239 restricts folding and set-up boxes

Limitation Order L-239 issued Sept. 16 by the WPB requires that no person shall accept or have set aside any quantity of boxes which will increase his inventory of a particular box item to more than either 25 tons or a 90-day supply, whichever is larger.

Order M-11-a amended to tighten zinc oxide control

M-11-a covering zinc oxide has been amended by the WPB. The order provides that no supplier shall ship more than one ton of zinc oxide a month unless the purchaser has a priority rating of AA-5 or better. Manufacturers of essential toilet preparations may secure preference ratings.

Automatic Pricing Regulation MPR 393 amended

An amendment to MPR 393 pertaining to the industry provides that a manufacturer desiring to reduce the price of any packaged cosmetic on which a price has previously been approved, may consider it as a new packaged cosmetic and price it at all levels of distribution from his initial sale down to the sale by the retailer. In other words he treats it as if it were a new packaged cosmetic under Section 6 of MPR 393, and prices it in accord with "the most comparable packaged cosmetic."

M-351 restricts wax paper for wrapping soap

By Order M-351 the use of wax paper in the wrapping of soap is prohibited if used in any fashion in addition to any other wax paper wrapping. Laminated paper shall not be used except for articles for which it had been used prior to Sept. 22, 1943.

Order M-352 places acetone and diacetone under allocation

Under Order M-352 those persons desiring to use less than 350 pounds of acetone or 415 pounds of diacetone in any one month must file purchase orders with suppliers who must in turn make application for shipment. Not more than 1750 pounds of acetone nor 2075 pounds of diacetone may be accepted by any one user in a month.

Preference Rating Order P-135 extends definition of laboratory

Preference Rating Order P-135 has been amended to include in the definition of laboratory, research laboratories, production control laboratories, clinical and educationals, but it does not include laboratories where products are made for commercial sale.

OPA places price ceiling on lanolin

The OPA established September 29 specific dollars-and-cents ceiling for sales by primary distributors and wholesalers of lanolin, used principally as an emollient and base in the manufacture of creams, salves and ointments. This is a separate price regulation, ceilings for producers of lanolin, being established in another regulation, MPR-53.

Glycerine allocation for October raised

Glycerine for use in cosmetics, dentifrices and shaving creams has been banned since March of this year. The supply situation has eased so considerably that these users will be given 90 per cent of the 1940 base period during October, and all drug users will be raised from 70 per cent to 100 per cent of the base period.

MPR 390 amended reclassifies cleansers sold by retail stores

Under amendment 3 of MPR 390 retail stores purchasing their soap and cleansers from wholesalers instead of manufacturers directly incur the added expense of the middleman and thus are at a disadvantage competitively. This amendment applies only to Group 3 and 4 stores in Region VII, composing Colorado, Idaho, Montana, New Mexico, Utah and Wyoming.

Preference ratings P-89 excludes cosmetic plants

Preference ratings P-89 which assigns ratings for repairs, maintenance and operating supply purchasers has been amended and now does not include cosmetic plants.

Ceiling price of ethyl alcohol on DSC sales revised

According to amendment 4 to MPR 28 of the Office of Price Administration, the ceiling price for grain distilled ethyl alcohol sold to Defense Supplies Corp. by large alcohol plants east of the Rocky Mountains was advanced one-half cent per gallon.

Thermoplastic order M-154 amended by WPB

General Preference Order M-154 covering thermoplastics was amended by the WPB on Sept. 14 to include first grade polymers of the methyl and higher esters of acrylic and methacrylic acids.

Photo by Janet L. Murray

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Any person may use thermoplastics owned by him but not in the possession of supplier on the effective date; owned by him and stored with his supplier for fire prevention regulations; were in the possession of this thermoplastics supplier and, on his purchase order, had been so processed prior to the effective date of restriction on the article as to render impracticable the use of the thermoplastics in a manner not subject to the restriction; or in the case of polymers of methyl and higher esters of acrylic and methacrylic acids, were authorized in writing by the WPB prior to Sept. 14 for use in the manufacture of the restricted article.

FDO 32 lifts restrictions on castor oil deliveries

An amendment has been made to FDO 32 covering the use and distribution of castor oil which suspends temporarily the restrictions on delivery, acceptance of delivery, use, processing and blending of castor oil during the period beginning Oct. 1, 1943, and ending Dec. 31, 1943.

Restrictions on the amount of castor oil received or used have also been limited.

FDO 53 amended in regard to distribution, use and inventory

FDO 53 covering the use and distribution of animal oil, neat's foot oil and red oil has been amended; in the case of neat's foot oil and red oil, the small exemption has been reduced to 450 pounds or less of each of these products. The provisions of the order with respect to delivery and use of animal oil have been suspended during the period beginning Oct. 2, 1943, and ending Jan. 31, 1944.

Inventories of animal oil are limited by the amendment to 60,000 pounds or the amount of animal oil used during any two consecutive calendar months in the first half of 1943, whichever is greater.

FDO 69 Amendment 1 deals with fruit used for alcohol

According to FDO 69 Amendment 1 no person shall use for the production of any product containing more than seven per cent of alcohol without special permission. This order does not apply to fruit for use in the production of food flavoring or pharmaceutical flavoring.

Allocation Order M-30 restricts receipt of alcohol

Allocation Order M-30 places restriction on the receipt and delivery of ethyl alcohol.

Maleic anhydride and maleic acid added to M-214

Maleic anhydride and maleic acid were put under allocation control through their addition to Order M-214 which formerly controlled only phthalic anhydride.

Amendment to Order L-103 to encourage simplified designs

Order L-103 as amended by the WPB on Sept. 23 specifies several new types, sizes and weights of standard glass containers, to encourage manufacturers to prepare new molds of the simplified designs.

Commodities removed from general to individual export licenses

The Office of Exports removed from general license to all destination, effective Sept. 27, a long list of commodities which henceforth require individual export licenses. Among these items are included shaving creams, shaving cakes, chemical glassware, unfilled glass containers, beverage bottles, scouring bricks, pastes, powders, soaps and household washing powders.

Price schedule of crude cottonseed oil amended by OPA

To clarify location differentials OPA has now specified cents-per-pound maximum prices on sales of crude cottonseed oil in six geographical areas instead of three. Amendment No. 6 to MPR 53 also provides that when crude cottonseed oil is sold to a buyer within the "switching limits" of the seller's locality, and where prior to price control it was customary to charge a premium for such sales, the premium shall continue to apply.

ODT eases tank-car restrictions on soap raw materials

Tank-car restrictions have been eased for additional soap raw materials so that special permits are no longer required for the shipment of babassu oil, grease oil, liquid soda ash, oleo oil, oleo stock, tallow oil and various other commodities in tank cars.

Talc price ceilings to be placed under more specific regulation

Ten representatives of companies producing talc, pyrophyllite and ground soapstone used in making paints, paper, rubber and cosmetics are studying a proposed price regulation covering manufacturers' sales of these products, OPA has anounced. The proposed regulations contain specific ceilings and are to replace the current ceilings of those established by order MPR 188.

Those who are serving on the committee to advise OPA on industry's pricing problems are:

R. F. Sherwood, Carolina Pyrophyllite Company, New York; W. Wallace Roff, Whittaker, Clarke & Daniels, Inc., New York; Henry H. Hanna, Clinchfield Sand & Feldspar Corporation, Baltimore, Md.; J. Frazier Glenn, Western Carolina Talc Company, Asheville, N. C.; Grant Huntley, Alberene Stone Corporation of Virginia, New York; J. P. Callahan, International Pulp Company, New York; Robert S. Pennock, Loomis Talc Corporation, Governeur, N. Y.; Eugene W. Magnus, Eastern Magnesia Talc Company, Burlington, Vt.; E. J. Ellsworth, Sierra Talc Company, Los Angeles, Calif.; W. E. Skeech, Southern California Minerals Company, Los Angeles, Calif.

WMC states plant workers not "Cosmeticians" are deferrable

As defined in a list of Non-deferrable Activities and Occupations recently issued by the War Manpower Commission, persons engaged in the production of toilet goods are not considered "cosmeticians." The term "cosmetician" according to Paul V. McNutt is used chiefly to describe those performing beauty parlor service and are identified as beauticians, facial experts or cosmeticians. It does not pertain to those who are engaged in the manufacture of cosmetics, except those who are employed in occupations which have been declared non-deferrable regardless of the activity.

Order L-317 limiting inventories of all shipping containers

WPB has issued Order L-317 limiting inventories on all shipping containers, including 65 per cent for cosmetics, 80 per cent for dentifrices and 65 per cent for perfumes.

This limitation period for the drug and cosmetic industries is for a 30-days' supply only.

Peppermint oil order revision under consideration

Some plans are being made by the WFA peppermint oil industry committee to replace the present freeze order on peppermint oil. Although it is believed that WPB has not yet made up its mind just what it will do, unofficial Washington feels sure that some order is in the offing. This belief is based on the fact that WPB could not very well ask WFA for a share of an already short material without placing strict control on the product; consequently some control order seems inevitable.

PERFUMERS

BASIC MATERIALS

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Rosafolio B. A. while comparatively inexpensive gives a rosy character of quality.

Rosafolio B. A. can be used in any formulae requiring a rosy effect. It is particularly suitable for powders and also stable in creams.

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NEWS and EVENTS

Wyeth, Inc., formed by merge of seven drug companies

The American Home Products Corp., has announced the formation of Wyeth, Inc., as one of the nation's largest ethical-drug firms through the grouping of seven companies now operating in the pharmaceutical, biological and nutritional fields. The new concern will be a wholly owned subsidiary of American Home Products Corp.

The subsidiary companies of American Home Products grouped in the new Wyeth company include John Wyeth & Brother, Inc., S. M. A. Corp., Reichel Laboratories, Inc., Gilliland Laboratories, of Marietta, Pa., Petrolagar Laboratories, Inc., of Chicago, General Biochemicals, Inc., of Chagrin Falls, Ohio, and Bovinine Co., of Chicago.

Harry S. Howard, president of the parent company, has been elected president of Wyeth, Inc., and plans to resign his American Home Products post to devote his entire time to the direction of the new company. Other officials of Wyeth will include Frank F. Law, of John Wyeth & Brother, vice-president, pharmaceutical division; Clyde C. Marshall, vice-president, nutritional division; and Dr. John Reichel, vice-president, biological division.

E. J. Robb now with division of Owens-Illinois Glass Co.

A new member of the merchandising division of the Owens-Illinois Glass Co., Toledo, is Eugene J. Robb, formerly associated with the Eastman Kodak Company.

From 1934 until September of this year, Mr. Robb was employed in various capacities by the Eastman company, his last assignment being in connection with the sales department.

T. J. Wood promoted by Procter and Gamble

The board of directors of Procter & Gamble Co. has announced the election of Thomas J. Wood as vice-president in charge of sales, and a director of the company. He fills the vacancy caused by the death of Clarence J. Huff. Mr. Wood joined Procter & Gamble in 1919 as a salesman in the St. Louis district. He served in sales supervisory capacities in the company's Western division and became manager of the Kansas City district office in 1923. Five years later he was promoted to Western division manager, and in 1938 was named general sales manager.

American Chemical Society meeting draws large numbers

One of the most comprehensive meetings of the American Chemical Society was held in Pittsburgh the week of Sept. 10. Subjects ranging from petroleum to penicillin and all through the plastics of esters and elastomers made up the program.

Thomas Midgley, Jr., was elected president for 1944, succeeding Dr. Per K. Frolich.

Southern Div. of Nat'l Paper Box Mfr's Ass'n war conference

The Southern Division of the National Paper Box Manufacturer's Ass'n held a war conference at Grove Park Inn, Asheville, N. C., Sept. 13 and 14. Setup paper box manufacturers from all states in the South attended the convention.

Speakers for this conference included A. B. Huyssoon, chief, Paperboard Section, WPB; John H. Paterson, technical consultant, Containers Division of WPB; G. Edgar Mooney, in charge of Setup and Folding Paper Box Department, Paper and Paper Products Division, OPA; William Ryon, representing the War Manpower Commission and a representative of the National War Labor Board, all of Washington, D. C.

President of the national association, with headquarters in Philadelphia, is Walter P. Miller, Jr., of Philadelphia, and chairman of the Southern Division is Fred R. ZurSchmiede, of Kentucky Paper Box Co., Louisville. Both these men spoke at the conference, as did W. Clement Moore, of Philadelphia, who specializes in matters pertaining to production, costs and taxes.

G. F. Hogg receives appointment at Hercules Powder Co.

Hercules Powder Co. has announced the appointment of G. Fred Hogg as sales director of its Naval Stores Department. Mr. Hogg joined the company in 1929 as a chemist, and in 1930 was transferred to the Naval Stores Department as a sales and service representative. In 1936 he was appointed manager of the Chicago Naval Stores Office. He has spent the past year at the company's industrial explosives plant in Hercules, Calif., where he served as technical assistant superintendent and chairman of the plant's War Manpower Committee.

Toilet Goods Ass'n appoints post-war planning committee

The Toilet Goods Ass'n, Inc., has appointed a post-war planning committee to work out a program for post-war planning by the association. A large number of subjects has been suggested for discussion by the committee and when the program is decided upon, a number of sub-committees will be appointed to study special subjects.

Members of the post-war planning committee include: C. M. Baker, Pond's Extract Co.; A. H. Bergmann, Oxzyn Co.; Lee Bristol, Bristol-Myers Co.; H. L. Brooks, Coty, Inc.; A. C. Burgund, Carr-Lowrey Glass Co.; B. Franklin Conner, Colt's Patent Fire Arms Mfg. Co.; Paul Douglas, Bourjois, Inc.; Davis Factor, Max Factor & Co.; Wm. Jacobs, Geo. W. Button Co.; Joseph Keho, Dorothy Gray, Ltd.; F. N. Langlois, United Drug Co.; H. J. Lehman, Wildroot, Inc.; Milton Martin, U. S. Industrial Alcohol Co.; Manning O'Connor, Colgate-Palmolive-Peet Co.; C. A. Pennock, Hudnut Sales Co., Inc.; L. R. Root, Scovill Mfg. Co.; Cecil Smith, Yardley & Co., Ltd.; Benson Storfer, Parfums Corday, Inc.; A. L. van-Ameringen, Van Ameringen - Haebler, Inc.; Karl Voss, Karl Voss Corp.; Northam Warren, Northam Warren Corp.; André Wick, Houbigant Sales Corp.; S. L. Mayham, executive secretary, Toilet Goods Ass'n; H. D. Goulden, director, Board of Standards, Toilet Goods Ass'n.

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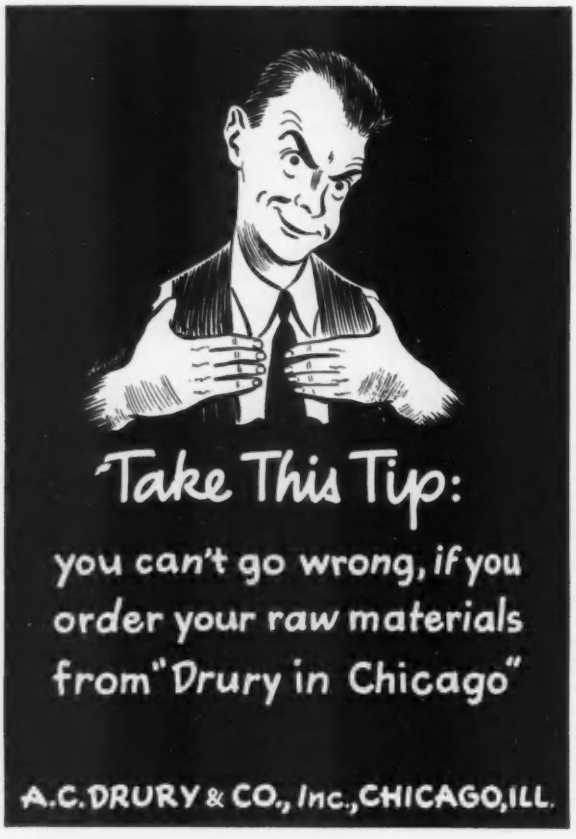

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Fiftieth Anniversary of Ungerer & Company, 1893-1943

This year, 1943, marks the fiftieth year for the business of Ungerer & Company, one of the leading essential oil houses in this market. F. H. Ungerer, when asked for a statement outlining the start and development of the business talked at length about his father, W. P. Ungerer, the founder of the business, and his older brother, W. G. Ungerer, now deceased. Concerning the remarkable development of the business in the past dozen years when he has been the president and guiding spirit, he was reticent, with the rather simple statement that, "Well, we hope the present business and organization is in itself evidence that we have progressed."

William Philip Ungerer was born in Basle, Switzerland, in 1833 and was trained as a perfumer in France, coming to America in 1865. After several years experience in manufacturing perfumery, soap and toilet articles, he became chief perfumer for Colgate and Company. This was in 1872. He remained with Colgate for 20 years, during which time he was closely identified with the development of the perfumery department of this well-known company. Being in poor health, he went to France. While there he made arrangements to represent in America several of the leading foreign raw material and specialty houses. Thus the start of the present business was really made on his return in 1893. His long and successful career came to a close with his death in 1907.

F. H. Ungerer

K. G. Voorhees

William G. Ungerer, the elder son, succeeded his father at Colgate's after receiving his training in Europe as a perfumer. But in 1895 he joined his father in the essential oil business. He was one of the most active leaders of his time in the art and science of perfumery and was recognized as a prime factor throughout the trade in the progress and development of the industry. He always kept in close touch with European sources and at the outbreak of World War I organized a fund for Ambulance Field Service.

After visiting France immediately after the close of the War, he headed a drive for the support of war orphans of Grasse which later became known as the Ungerer Fund. In recognition of such services he was made a Chevalier of the Legion of Honor in 1927. As one of the most widely known and deservedly popular men in the raw materials trade, his death in 1930 was a distinct loss to the industry.

Frederick H. Ungerer, the younger son, joined the business about the same time as his brother. The firm was incorporated as Ungerer & Company in 1901, with W. P. Ungerer president, W. G. Ungerer vice-president, and F. H. Ungerer secretary and treasurer. On the death of the father in 1907 W. G. Ungerer became president and F. H. Ungerer vice-president and treasurer.

F. H. Ungerer became president on the death of his brother in 1930, retaining also the office of treasurer. This was assuming heavy responsibilities at the beginning of the well-remembered depression years. He had always been responsible for inside organization work, finances etc., but was particularly interested in the development of ever-increasing activities in essential oils and aromatic chemicals, bringing the company's activities to the top in both fields as well as in perfume raw materials and specialties. Mr. Ungerer piloted the business through the very difficult depression years, in which period he was successful in broadening and increasing the scope of the company's operations each year. During this period their warehouse building at 328 West 28th Street, New York, was enlarged by the addition of a new building on the adjoining property belonging to the company. This improvement more than doubled the handling and manufacturing facilities. The company owned the property they occupied for many years at 115 West 20th Street where they remained until January 1, 1942, when they took an entire floor at 166 Sixth Ave., which was especially equipped with modern offices and improved laboratory equipment for the technical and research staffs.

Kenneth G. Voorhees came into the company in 1932. He had for several years been a successful merchandise executive and buyer for a large mercantile house. With this experience he progressed rapidly in the essential oil industry. He soon took over important work of handling all purchases and progressively assuming further heavy and active responsibilities of the business. He is now the executive vice-president of the company.

In 1937 the Budd Aromatics Company was taken into the Ungerer organization, by which Ivan H. Budd came into the company as director and vice-president in charge of sales. Also with him both W. H. Dunney and W. H. Dunney, Jr., were brought into the organization as perfume chemists.

During these years the business developed and expanded; branch offices were opened in the larger cities and representatives located in the key distribution centers throughout the country serving the industry in which the company in its 50th year enjoys the respect and good will of all factors throughout the trade.

H. F. Elberfeld elected officer of Controllers Institute

H. F. Elberfeld, vice-president of Colgate-Palmolive-Peet Co., Jersey City, was elected a vice-president of the Controllers Institute of America at its annual business meeting held recently. John C. Naylor, vice-president and comptroller of the Pet Milk Co., St. Louis, was elected president, succeeding T. C. McCobb, controller of the Standard Oil Co. of New Jersey.

Chicago Drug and Perfumery Ass'ns hold golf tournament

The Chicago Drug & Chemical Ass'n and the Chicago Perfumery Soap and Extract Ass'n held their last golf tournament of the season at Rolling Green Country Club, Arlington Heights, Ill., on Sept. 28. J. A. Gauer, of Fritzsche Brothers, Inc., was in charge of reservations.

Toilet Goods Ass'n moves to new quarters

The Toilet Goods Ass'n, Inc., is now located in new offices in Room 1427, Time & Life Bldg., 9 Rockefeller Plaza, New York 20, N. Y.

Merck & Co. employees fill quota in 3rd War Loan Drive

Employees of Merck & Co., Inc., Rahway, N. J., went over the top on their quota for the Third War Loan Government Bond Drive on Sept. 24 with a quota of $300,000 passed as of that day. The bonds subscribed for will be designated for the purchase of two ambulance planes and possibly additional equipment for the Armed Forces.

More than 300 canvassers took part in the drive, which was conducted by the Labor-Management Committee for War Production under the direction of E. C. Bartell, executive chairman. In addition to the subscriptions of employees, the company itself added $1,000,000 to its purchases of government securities.

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Who never to herself hath said.
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Technical advisory service set up for small plants

Brig. General Robert W. Johnson, chairman of the Smaller War Plants Corp., has announced the establishment of a technical advisory service set up by regions throughout the country to serve the interests of small plants. The service will put at the disposal of the small manufacturer needing technical research in the solution of a production problem, information drawn from government agencies, trade associations, technical magazines and the research laboratories of educational institutions and private industry.

Helfrich Labs. announces two additions to its force

Helfrich Laboratories of N. Y., Inc., announces the addition of Harold F. Senn to the staff as production manager of the New York Helfrich plant. Mr. Senn has been identified with Elizabeth Arden for the past 23 years in various manufacturing departments.

Helfrich Laboratories also announces the return of Miss Matilda Brendel as assistant to Grant H. Heidbreder, executive vice-president and general manager. Miss Brendel has been away for a little over a year.

Market Research Department formed by Colgate-Palmolive

Colgate-Palmolive-Peet Co. has formed a new Market Research Department which will be divided into two sections, advertising and product research, and sales research. Fremont J. Knittle, associated with the company for the past five years, will manage the former; Dr. Harry Deane Wolfe, formerly with the WPB, will manage the latter.

L. L. Shapiro appointed plant manager of Glyco Products Co.

Louis L. Shapiro has been appointed plant manager of the Glyco Products Co., Inc., Brooklyn, N. Y.

Mr. Shapiro, for the past 14 years, has served as chief chemist, director of the Chemical and Research Departments and assistant superintendent of the Wilson-Martin Division of Wilson and Co., Inc.

E. W. Highsmith succeeds J. A. Graves as counsel for Hercules

Hercules Powder Co. has announced the retirement of John A. Graves as general counsel, and the appointment of E. Way Highsmith, assistant general counsel, to succeed him.

Mr. Graves, who is retiring because of ill health, joined Hercules in 1918 as assistant general counsel, and in 1939 became general counsel in charge of the Legal Department.

Mr. Highsmith, who has served as assistant general counsel since March 1, 1937, was first connected with the company in 1929 as a member of the law firm of Reese, Scarlett, Bennet and Highsmith, counsel for Hercules in Brunswick, Ga.

Boston BIMS brave storm for final golf party

Approximately 50 BIMS of Boston braved a real New England Nor'easter, Sept. 30, at Woodland Country Club at their last golf party of the season.

Pete Niles, chairman of the BIMS of Boston, has announced the prize winners as follows: Low gross, Peter Forsman, C. H. Forsman Co.; low net, M. E. Nourse, Howe & French, Inc.; and kickers, Harold Ingham, Ingham & Co. The grand prize was won by Harold Dalbeck.

Flavoring Extract Mfrs. Ass'n monthly dinner meeting

The members of the Flavoring Extract Manufacturers' Association of California held its monthly dinner-meeting at the Los Angeles Athletic Club, Los Angeles, Sept. 16, Charles S. Marston, Jr., president, presiding. The principal speaker was Vice-President J. C. Morse of Dan B. Miner Co., a prominent Los Angeles advertising agency, who spoke on "Merchandising Trends and Ideas." Mr. Morse told of the new developments in packaging methods, transportation ideas, consumer demands and markets, and the like, that may be expected after the war. He said the present conflict will open up to manufacturers new outlets all over the world. A long open-forum followed during which many questions were asked and answered, especially concerning food products in which flavoring extracts have a part.

The recent questionnaire circulated among members for the purpose of ascertaining what they preferred in the way of program topics revealed that there were three subjects in which the greatest interest was felt; new merchandising ideas for flavoring extract men, purely technical subjects concerned with the industry and world events. It was decided that hereafter, programs will be prepared with all three subjects in mind.

Two new members were enrolled; representing the McNerney Chemical Corp., Los Angeles, and Givaudan-Delawanna, Inc. The entertainment feature of the evening consisted of two sound movies, dealing with recent war events in and near Italy.

K. Ide and W. F. Silbersack promoted by American Home Products

Knox Ide has been elected president and Walter F. Silbersack executive vice-president and general manager of American Home Products Corp., Alvin G. Brush, chairman of the Board, has announced.

Mr. Ide has been executive vice-president of the corporation and Mr. Silbersack has been vice-president in charge of all advertised products.

Their promotions follow the election of Harry S. Howard, former president of American Home Products, as president of Wyeth, Inc., new ethical drug company which American Home Products has formed.

Knox Ide

W. F. Silbersack

In 1936 Mr. Ide was elected a director of American Home Products Corporation and the following year entered the corporation's executive family as secretary. He was elected a vice-president of American Home Products in 1941, holding the positions of secretary and general counsel at the same time. He was elected executive vice-president of the corporation on January 5, 1943.

Mr. Silbersack has been an executive of American Home Products and constituent companies for 20 years.

He joined the Cincinnati advertising firm of Procter & Collier in 1917. He remained until 1921, when he joined the advertising firm of Thompson Koch Co., also of Cincinnati. In 1923 Mr. Silbersack went with the A. S. Boyle Co. as advertising manager. He had advanced to general manager when American Home Products acquired the A. S. Boyle Co., in 1927. Mr. Silbersack was elected a director of American Home Products in 1935 and vice-president in charge of all advertised products in 1942.

Mr. Silbersack is chairman of the Boyle Co. and of Midway Chemical Co., and president of the Anacin Co., Kolynos Co., and Bi-So-Dol Co., all subsidiaries of American Home Products.

A. W. Tosh named president of Prichard & Constance, Inc.

Prichard & Constance, Inc., perfumery products, has announced the appointment of Arthur W. Tosh as president.

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Michigan Allied Drug & Cosmetic Ass'n tournament

The Allied Drug and Cosmetic Ass'n of Michigan held its final golf tournament on Sept. 22 at Birmingham Country Club. The match play cup was won by E. E. Van Allsburg, Ecclestone Chemical Co., Inc.; low gross cup by H. P. Walmsley, Monsanto Chemical Corp.; and low net cup by Jack La Rue, Magnus, Mabee & Reynard, Inc.

Other prizes in the form of war bonds and stamps were awarded to the following:

FIRST FLIGHT PLAYERS—First place, Buck Walmsley, Monsanto Chemical Co.; second place, E. E. Van Allsburg, Ecclestone Chemical Co.; third place, Ray Vicary, Mark Allen & Co.

SECOND FLIGHT PLAYERS — First place, Jack La Rue, Magnus, Mabee & Reynard, Inc.; Gordon Buck, Standard Oil Co.; third place, Hank Royce, Wolverine Carton Company and Lowe Paper Company.

THIRD FLIGHT PLAYERS—First place, Bert Herzog, Union Trucking Co.; second place, Stuart Cowell, J. T. Baker Co.; third place, Walter Daniel, Parke-Davis & Co.

NON-GOLFERS—First place, M. G. deNavarre, Maison deNavarre Associates; second place, Don Melville, F. W. Kerr Co.; third place, Jim Day, Dow Chemical Co.

Containers Manufacturer's Institute formed

The Specialty Flexible Container Manufacturer's Institute has been formed by a group of specialty bag manufacturers who met in New York. It is expected about 100 manufacturers will become members. Gordon Friend, Thomas Royal Co., Philadelphia, was elected president.

The Institute plans to simplify and standardize the products being made for the Government, to act as a fact-finding body, and to undertake research on post-war markets for new products that are now being made for the Army, Navy and Lend Lease.

Second edition of McKesson & Robbins, Inc., booklet published

A second edition of "Your New Position as a Drug Clerk," by Theodore N. Beekman and Edward E. Garrison of Ohio State University, is being published by McKesson & Robbins, Inc., to meet continued demands for copies.

Esme of Paris, Inc., files incorporation papers

Esme of Paris, Inc., New York, N. Y., has been formed with a capitalization of 200 shares of no par value. The incorporators are Robert F. Matz, Jr.; Esme C. D. Matz, Jr.; and Kohn M. Keesing.

Revlon Products Corp. moves executive and sales staff

Revlon Products Corp. has moved its executive and sales staff to 745 Fifth Avenue, New York City.

S. D. Koonce chemist for Innis, Speiden & Co.

Innis, Speiden & Co., New York, announces that Samuel D. Koonce, who received his Ph.D. in Physiological Chemistry from Ohio State University in June, has become associated with the company. Mr. Koonce will be located at the Boyce-Thompson Institute for Plant Research, Inc., Yonkers, N. Y., where he will conduct investigations on the application of Larvacide (chlorpicrin fumigant) and other substances for the production and protection of foodstuffs.

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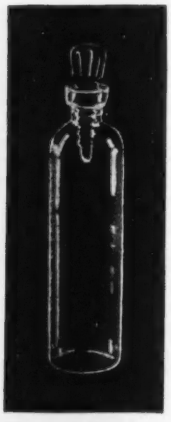

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American Cholesterol Products, Inc. in new and larger quarters

American Cholesterol, Products, Inc., manufacturers of cholesterol, emulsifiers, absorption bases, softening and dispersing agents, is now located in new and larger office quarters at 58 W. 40th St., New York, N. Y., where it is in a better position to handle its growing volume of business. The company's factory and laboratories are located in Milltown, N. J. As a service to manufacturers of toilet creams, hair preparations, ointments and lotions the company maintains a research laboratory for consultation.

R. T. Thompson promoted by McKesson & Robbins, Inc.

Jesse W. Wynne, regional vice-president of McKesson & Robbins, Inc., has announced the appointment of Ralph T. Thompson as manager of the company's Southern Drug Co. Division, Houston, Texas. The directors of the parent corporation appointed Mr. Thompson an assistant vice-president at a meeting in New York on Aug. 25.

R. T. Thompson

Mr. Thompson, who has been operations manager of the company's Van Vleet-Ellis Division in Memphis, Tenn., since 1930, entered the wholesale drug business in 1916 with the Hessig-Ellis Drug Co. of that city.

C. M. Baker member of N. Y. committee of National War Fund

Clifford M. Baker, president of Pond's Extract Co., New York, N. Y., has accepted appointment as chairman of the cosmetics and perfumes group of the New York committee of the National War Fund, it was announced recently by James A. Farley, chairman of the commerce and industry division.

Cummer Co. Div. buys plant, plans move to Vermont

The Cummer Company Division of Sterling Drug, Inc., has purchased property in Brattleboro, Vt., and will move its manufacturing plant there from Bedford, Ohio, about Dec. 1, according to Harold B. Thomas, Sterling vice-president.

Among executives who will move from Bedford to Brattleboro are J. N. Cooke, divisional vice-president; A. Haymarch, plant superintendent; O. J. Nickel, sales manager; H. L. Evans, chief accountant; J. M. Pratt, purchasing agent and office manager; and C. L. Denhard, assistant sales manager.

The Cummer Company Division manufactures and distributes the Energine line of products.

Frozen metallic materials may be released for cosmetic containers

When the surprise order freezing metallic materials in the hands of cosmetic manufacturers or their suppliers was issued, many manufacturers and suppliers found themselves with such materials in the form that was unacceptable to WPB as they were not suitable for war use. This metal, the holders claim, is deteriorating and going to waste, and thus should be released to ease the tight cosmetic closure and container situation.

Some slight success has been met with by the cosmetic companies in their efforts. However, the releasing has been done on case-by-case consideration, from which it would seem that WPB has allowed freeing of the metal for closures and not for containers.

Order L-103-b discussed by cosmetic industry with WPB

The main subject up for discussion at the October 7th WPB Cosmetic Industry Advisory Committee meeting was the order L-103-b and its effect on the whole industry (65 per cent quota on receipts of glass containers). WPB Container Division has already announced that the order will be extended to the end of the year at least. There was an indirect plea that in extending this order the 65 per cent be raised to 80. There was a general belief also that there would be some kind of quota order for the duration, but not at 65 per cent.

The point was made by the industry that the present order did fall upon all branches of the industry alike. To companies dealing in one item only, having no back inventories on which to draw it meant a flat 65 per cent cut in their business. Others who could increase the size of the jar without jeopardizing volume sales did not feel that the restriction weighed so heavily upon them and were able to keep up production 100 per cent. Also companies having complete lines would be able to concentrate on their popular items, neglecting their slower moving ones for the duration.

The industry made its presentation so forcefully and effectively that it is almost certain that WPB will probably provide amendments easing the burden of the quotas on those hardest hit and will provide a method for handling individual appeals.

The subject of the opal container was also brought up and was pressed for some solution. There seemed to be a difference of opinion as to just how great was the idle supply of these containers. If after investigation by WPB there seems to be an excess supply of this type WPB will first try to get manufacturers who have never before used these jars to use them, but if this is impossible or if this does not use up the excess, WPB assured that there would be no waste supply; it would be allocated.

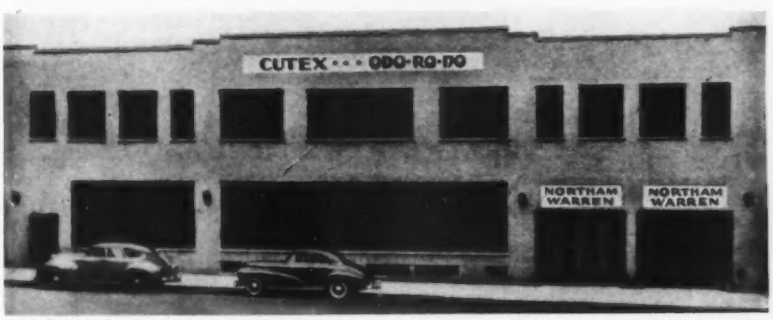
The result of the meeting was that the cosmetic industry now feels that the WPB realizes the hardships that the industry has undergone by this order in comparison with other glass container users.

Obituary

Charles Frederick Breeze

Frederick Charles Breeze, managing director of the W. J. Bush Co. of Canada, Ltd., died Oct. 1 in the Royal Victoria Hospital, Montreal, at the age of 61.

Mr. Breeze was born in London, England, and after being connected with the Bush firm, manufacturers of essences, in London, came to Canada in 1910. In 1912 he was appointed manager of the company's offices in Toronto and from 1919 to the time of his death, he was managing director of the head office in Montreal. He leaves a widow and one son.



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Trade Jottings for Month of Sept.

BABS CREATIONS presents a new gift package of aerated soap—individual buds of soap that melt in the hands upon washing. These "Buds of Foam" come 70 to the box and are available in four pastel shades.

BULLOCK'S DEPARTMENT STORE has set up its perfume lines in individual booths for each major trade mark. Permanent booths with a salesgirl for each one have been built on the main floor for Coty's, Houbigant, Charles of the Ritz, Helena Rubinstein and other leading producers.

These booths help to emphasize the various lines and simplify and encourage prospective buyers to buy by leading brands. Particularly is this so in the perfume purchases.

COTY, INC., because of its inability to obtain the essential raw materials plans to discontinue in the near future, the manufacture of two of its perfumes, Chypre and Le Vertige.

COTY, INC., entertained recently at a cocktail party at its Fifth Avenue, New York showrooms. The lovely new packages which the company had designed together with many attractive combinations of the regular Coty products were effectively displayed.

MARIE EARLE held an unique party recently at Sherry's, called a Christmas sleigh ride. The many attractive combinations of Marie Earle boxes were augmented by a number of useful street-bags as well as a very special evening bag. Rallet Perfumes were also an interesting part of the display.

The Christmas sleigh ride was carried out with a Santa in his sleigh accepting requests for Christmas.

SARA FOX, former publicity director of Helena Rubinstein, Inc., a post she held for the past 12 years, has announced the opening of her own public relations office in the Fuller Building, New York City. Among the accounts for which she will act as publicity counsel is Delettrez, Inc.

RICHARD HUDNUT has keyed its advertising copy to urge women to take jobs in war production plants or in necessary civilian service. The new copy theme has been conceived to allay the fears of many women with regard to their personal appearance when working in defense industries. Shortcuts to beauty detailed in the new campaign are expected to have a salutary effect in enrolling women into the ranks of industry and other jobs.

JOHN HUDSON MOORE, president of John Hudson Moore, Inc., has returned to New York from an extensive trip throughout the country. On the trip he was accompanied by Mrs. Moore, who as Louise Paine Benjamin, is associate editor of "Ladies' Home Journal."

CLARA OGILVIE, of Ogilvie Sisters, returned recently from a trip to Canada. Among the stops she made was one at Montreal, where Ogilvie Sisters have a concession.

F. X. TRIMBACH, GOLDEN PEACOCK, has just advised us of the tremendous increase in the company's business—the sale of Golden Peacock Bleach Creme. This product increased in sales 79 per cent during the first quarter of this year and the increase for the first half was better than 120 per cent over last year when the advance was partially checked by the WPB restricting order L-103-b.

PLOUGH, INC., Memphis, Tenn., has set an example in the purchase of $4,000,000 in War Bonds of the Third War Loan Drive. In the second War Loan campaign the firm purchased $3,000,000 which was added to a previously purchased million dollars in the first campaign, making a total of $8,000,000. J. Calvin Ozier, secretary and treasurer of Plough, Inc., stated that the company considered it a privilege to do all that they could to back our armed forces.

ARTHUR RUSHTON, representative in the Pennsylvania territory for Houbigant, Inc., has been called to service in the U. S. Navy, and is now undergoing training at Sampson, N. Y.

SHULTON, INC. in its Fall magazine advertising campaign carries a war message in each advertisement. On the need for womenpower there are 26,000,000 messages. In addition to this, every ad carries the line, "Conserve—Spend Wisely—Buy War Bonds."

Such slogans as "In the American Tradition" subcaptioned with "Do with Might and Main what you can Do"; "Useful and Beautiful," "Useful and Dutiful."

HERBERT I. SPITZER is no longer sole owner of Hubere Cosmetics, Chicago. Effective Sept. 1, the "Hubere Cosmetics" will be owned by a co-partnership, consisting of Herbert I. Spitzer and Phillis S. Spitzer, Mr. Spitzer has announced.

DIANNE WHEELER is now handling the publicity for Revlon. Miss Wheeler was formerly with Primrose House.

VIMMS AND TUSSY recently gave a cocktail party at the Waldorf-Astoria to present Miss America, who has toured the country in a bond-selling drive under the sponsorship of Lever Bros. Co. and Lehn and Fink.

WILLIAM S. DORSEY, sales representative for Bourjois, Inc., in the Pennsylvania territory, is now in the United States Army, stationed at Camp Croft, S. C.

Radio Programs of the Industry

AMERICAN HOME PRODUCTS, INC., will again be on the air this season with "Mr. Keen, Tracer of Lost Persons," and "Easy Aces," both effective as of October 27. Effective September 20 the company renewed its features, "The Romance of Helen Trent," and "Our Gal Sunday." Products featured are Benefax, Bi-So-Dol, Anacin and Kolynos.

ARMSTRONG CORK CO. started its feature "Armstrong's Theater of Today" for another season. On the program are featured well-known artists of radio, stage and screen.

BOURJOIS, INC., on October 14 started its musical program "Here's to Romance." Evening in Paris face powder will be featured.

COLGATE-PALMOLIVE-PEET CO. continues its several programs over the air. "Inner Sanctum," "The Judy Canova Show," the eerie and the light, are its choice for entertainment.

PRINCE MATCHABELLI, INC., sponsors Stradivari orchestra for its Stradivari Perfume. The program, as last year, will feature instrumentalists from top ranking New York symphony orchestras playing Stradivari instruments made in the 16th century and now in the Wurlitzer collection.

PROCTER AND GAMBLE CO. features a serial of covered wagon days known as "A Woman of America," started Sept. 27, on behalf of Ivory Snow.

REVLON makes its debut on the radio in the Revlon Revue starring Gertrude Lawrence. Gertie will keep her audience posted on nail enamel and lipstick.

E. R. SQUIBB & SONS launched a new program on Oct. 11 entitled, "To Your Good Health."

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WANTED: 2—Dry Powder Mixers; 2—Pony Mixers; 2—Tablet Machines; 1—Filter; 3—Kettles; 2—Filling Machines. No dealers. Write Box 2353, The American Perfumer and Essential Oil Review.

FOR SALE—Small job lot imported French perfume bottles, boxes, powder boxes; other supplies. Write Box 2445, The American Perfumer and Essential Oil Review.

HELP WANTED

EXPERIENCED laboratory Chemist needed for routine checking and detail work in laboratory manufacturing cosmetics. Good opportunity. State complete details in first letter. Write Box 2442, The American Perfumer and Essential Oil Review.

COSMETIC CHEMIST—Private label manufacturer with Eastern and Western plant, permanent. State age and experience, salary expected. Write Box 2446, The American Perfumer and Essential Oil Review.

SALESMAN—Long-established and well-known manufacturer of perfumery and cosmetic raw material has opening for experienced salesman, in middle-west, preferably one with chemical training. Salary basis. Send details regarding age, education, experience, etc. Write Box 2447, The American Perfumer and Essential Oil Review.

POSITION open in thoroughly established house for chemist or practical technician with ample experience in the distillation and fraction of essential oils. Full information will be held in strict confidence. Write Box 2448, The American Perfumer and Essential Oil Review.

POSITION open for sales representative experienced in essential oils-aromatic chemicals-perfume compounds. Should be able to handle correspondence and assist executive. Give full particulars—confidential—well-established house. Write Box 2449, The American Perfumer and Essential Oil Review.

HERE is an opportunity for an ambitious man, capable of organizing our expanding domestic sales of essential oils, aromatic chemicals and compounds—somebody who knows the trade, knows how to sell, has vision and initiative to work with us, not for us and help build up a business. Phone—Whitehall 4-4066.

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2—Karl Kiefer Visco Filling Machines.
2—Karl Kiefer 72-spout Bottle Washers, m.d.
24—Monel Open Tanks 25 gal.; 9-45 gal.
1—Ertel 7-Disc Filter, Pump and Motor.
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Etc.
Your inquiries are invited

Alcohol — At-the-Moment Problem

FREEZING of peppermint oil supplies by the War Food Administration; announcement of maximum sales prices on mint oils by the Office of Price Administration; and a rather severe reduction in orange oil prices by the California Fruit Exchange were but a few of the many interesting developments that took place in the raw materials market over the past month.

BEANS FROM MADAGASCAR

Flavoring extract manufacturers placed sizable contracts for vanilla beans following reports to the effect that a good fast American steamer en route here had aboard 108 tons of beans from Madagascar. During the early part of the period under review, extract manufacturers seemed inclined to mark time despite the fact that they were assured the large quantity of vanilla would be shipped from Madagascar. The change in attitude followed on a report from the British Food Mission which stated that additional shipments from Madagascar could not be expected and that no regular service from the Island could be established.

As the result of the buying movement, a minimum of 50 per cent of the beans in transit had been sold within a relatively short time. The sales were made on the basis of prompt shipment after arrival of the steamer.

Another interesting development was the announcement of a program by the War Food Administration to bring about a 28 per cent increase in soap production for civilian use. The 28 per cent increase in production as stated in the official announcement from the government agency proved rather confusing to some, however, who explained that it was understood soap production for household purposes will be increased from 80 to 90 per cent, while output of soaps for industrial use will be boosted from 80 to 110 per cent.

GLYCERIN SUPPLIES INCREASE

The increase in the saponification of fats that will come as the result of this plan will, it is believed, result in a further increase in glycerin supplies. As the output of the latter improves, a further easing of restrictions covering its use will probably be necessary.

ALCOHOL SITUATION IS SERIOUS

The real problem regarding basic material supplies insofar as the cosmetic, perfume and toilet preparation trades are concerned continues to be alcohol where a new and sudden demand served to upset all previously estimated figures regarding future consumption. The demand, according to reports, came from a government procurement agency, and the industry as a whole is facing a more serious problem than at any time since the war started. Whiskey manufacturers producing war alcohol were denied a so-called holiday of two weeks at which time they had planned to manufacture goods for the civilian trade.

MEXICAN VANILLA BEANS TIGHT

Prospects regarding the coming crop of Mexican vanilla beans appear less favorable. Little or no rain has been noted from the middle of July to September, according to advices reaching here, and, as a result, the green beans have failed to develop as well as many had hoped. It now appears the coming crop, including both cut and whole beans, will only reach 200,000 to 250,000 pounds as against earlier estimates of 400,000 pounds. Trade factors point out, however, that it is still rather early to get a clear picture of the situation but from the reports coming in, the above figures represent a fairly accurate view of present conditions as they are. With most of the old crop Mexican beans sold and little hope of regular imports of Bourbon beans from Madagascar, the demand for Tahiti beans is likely to remain fairly constant especially since arrivals from the Island appear to be quite regular.

POTASH AND SODA SCARCE

Of interest in those industrial chemicals used by soap manufacturers was a tightening in the supply of caustic potash, and the extreme shortage of caustic soda. Caustic soda is scarcer than at any time in the history of the industry with major producers working plants to capacity to meet war-time needs and to build up a reserve of some 40,000 tons of material, according to reports, needed for Lend-Lease.

BRAZILIAN MENTHOL ON MARKET

Brazilian menthol appeared in the market with about 84 cases being received here toward the close of last month. As far as could be learned, however, the goods had been sold prior to arrival at what some regarded as fancy prices. Predictions to the effect that Brazil will produce about 200 tons of menthol from the coming crop are discounted here. In order to produce such a quantity, about 1,300,000 pounds of peppermint oil would be needed and it does not appear reasonable to suppose such an increase in oil production could be possible from one year to the next. Moreover, advices from Brazil reported that a severe cold wave was noted. Under the circumstances one could hardly make any accurate predictions regarding the coming crop.

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Artificial	1.50@	1.80
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C 9	31.50@	32.00
C 10	22.00@	29.00
C 11	22.00@	26.00
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Benzyl Benzoate	1.10@	1.65
Benzyl Butyrate	2.25@	3.00
Benzyl Cinnamate	5.15@	6.00
Benzyl Formate	3.75	Nom'l
Benzyl-Iso-eugenol	10.25	Nom'l
Benzylidenacetone	2.25@	3.40
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Bornyl Acetate	2.00	Nom'l
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Cinnamic Acid	3.75@	4.50
Cinnamic Alcohol	3.35@	4.00
Cinnamic Aldehyde	1.65@	1.75
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Cinnamyl Butyrate	12.00@	14.00
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Citral, C. P.	3.50@	4.00
Citronellol	6.75@	7.00
Citronellyl Acetate	6.75	Nom'l
Coumarin	3.00@	3.50
Cuminic Aldehyde	8.00@	11.25
Diethylphthalate	.24@	.33
Dimethyl Anthranilate	4.55@	5.00
Ethyl Acetate	.25@	.50
Ethyl Anthranilate	5.75@	7.50
Ethyl Benzoate	.90@	1.15
Ethyl Butyrate	.75@	.90
Ethyl Cinnamate	3.25@	3.75
Ethyl Formate	.60@	1.00
Ethyl Propionate	.80	Nom'l
Ethyl Salicylate	.90@	1.00
Ethyl Vanillin	5.25@	6.00
Eucalyptol	3.50	Nom'l
Eugenol	2.75@	3.25
Geraniol, dom.	3.85@	5.25
Geranyl Acetate	3.50@	4.00
Geranyl Butyrate	6.00@	6.85
Geranyl Formate	6.85@	8.25
Heliotropin, dom.	3.35@	6.00
Hydrotopic Aldehyde	15.00@	18.00
Hydroxycitronellal	7.75@	10.00
Indol, C. P.	26.50@	30.00
Iso-borneol	1.00@	1.10
Iso-butyl Acetate	1.25@	2.00
Iso-butyl Benzoate	1.65@	2.70
Iso-butyl Salicylate	2.70	Nom'l
Iso-eugenol	4.00@	4.85
Iso-safrol	3.00	Nom'l
Linalool	7.75	Nom'l
Linalyl Acetate 90%	8.75@	10.00
Linalyl Anthranilate	15.00@	
Linalyl Benzoate	10.50@	
Linalyl Formate	9.00@	12.00
Menthol, Japan	16.00	Nom'l
Chinese	16.00	Nom'l
Synthetic	15.75	Nom'l
Methyl Acetophenone	1.55@	1.80
Methyl Anthranilate	2.50@	2.80
Methyl Benzoate	.70@	1.10
Methyl Cellulose, f.o.b. shipping point	.60	Nom'l
Methyl Cinnamate	2.25@	3.50
Methyl Eugenol	3.50@	6.75
Methyl Heptenone	3.25	Nom'l
Methyl Heptine Carbonate	40.00@	60.00
Methyl Iso-eugenol	5.85@	10.00
Methyl Octine Carbonate	24.00@	30.00
Methyl Paracresol	2.50	Nom'l
Methyl Phenylacetate	3.50@	4.00
Methyl Salicylate	.35@	.38
Musk Ambrette	4.25@	9.00
Ketone	4.40@	9.70
Xylene	1.65@	2.50
Neroline (ethyl ether)	2.00@	3.15
Paracresol Acetate	2.50	Nom'l
Paracresol Methyl Ether	2.60@	3.50
Paracresol Phenyl-acetate	6.50@	8.50
Phenylacetaldehyde 50%	3.00@	3.75
100%	4.50@	5.00
Phenylacetic Acid	3.00@	3.75
Phenylethyl Acetate	3.85@	5.00
Phenylethyl Alcohol	2.50@	3.00
Phenylethyl Anthranilate	16.00@	
Phenylethyl Butyrate	5.00@	7.25
Phenylethyl Propionate	4.25@	6.00
Phenyl Formate	12.50@	18.00
Phenyl Valerianate	16.00@	17.50
Phenylpropyl Acet.	10.00	Nom'l
Santalyl Acetate	20.00@	22.50
Skatol, C. P. (oz.)	5.35@	6.00
Styralyl Acetate	2.50@	3.00
Styralyl Alcohol	9.25@	12.00
Vanillin (clove oil)	2.60	Nom'l
(guaiacol)	2.35	Nom'l
Lignin	2.35	Nom'l
Vetivert Acetate	25.00	Nom'l

Violet Ketone Alpha	18.00	Nom'l
Beta	15.00	Nom'l
Methyl	6.50	Nom'l
Yara Yara (methyl ester)	2.50	Nom'l

BEANS

Angostura	2.50@	3.00
Bourbon, whole	8.50@	9.00
South American	9.50@	10.00
Tahiti	3.50@	4.10
Tonka Beans, Surinam	.70@	.95
Vanilla Beans		
Mexican, whole	9.00@	9.50
Mexican, cut	8.25@	8.50

SUNDRIES AND DRUGS

Acetone	.8½@	.09
Almond meal	.25@	.27
Ambergris, ounce	17.00@	20.00
Balsam, Copaiba	.50@	.54
Peru	1.30@	1.50
Beeswax, bleached, pure U. S. P.	.57	Nom'l
Yellow, refined	.52½	Nom'l
Bismuth, sub-nitrate	1.20@	1.22
Borax, crystals, carlot ton	55.50@	58.00
Boric Acid, U. S. P., cwt.	6.95@	7.55
Calamine	.18@	.20
Calcium, phosphate	.08@	.08¾
Phosphate, tri-basic	.09@	.10
Camphor, domestic	.68@	.83
Castoreum	13.00@	26.00
Cetyl Alcohol	1.75	Nom'l
Pure	2.25	Nom'l
Chalk, precip.	.03½@	.06½
Cherry Laurel Water, carboy	5.75@	6.25
Citric Acid	.21	Nom'l
Civet, ounce	28.00@	49.00
Clay, colloidal	.07@	.15
Cocoa Butter, lump	.25½@	.27
Cyclohexanol (Hexalin)	.30@	.50
Fuller's Earth, ton	15.00@	33.00
Glycerin, C. P., drums	.18¼@	.18¾
Gum Arabic, white	.42@	.45
Amber	.14¾@	.15½
Gum Benzoin, Siam	4.00@	4.25
Sumatra	.60@	.65
Gum Galbanum	1.80@	2.00
Gum Myrrh	.60@	.65
Henna, pwd.	.30@	.35
Kaolin	.05@	.07
Labdanum	3.25@	5.00
Lanolin, hydrous	.35@	.36
Anhydrous	.36@	.37
Magnesium, carbonate	.09@	.10¾
Stearate	.24@	.27
Musk, ounce	50.00	Nom'l
Olibanum, tears	.25@	.30
Siftings	.11@	.13
Orange Flower Water, gal.	2.00@	2.50
Orris Root, African, pwd.	1.05@	1.20
Paraffin	.06¼@	.09
Peroxide	1.10@	1.75
Petrolatum, white	.06¼@	.08½
Quince Seed	1.75@	2.00
Rice Starch	.09@	.10
Rose Leaves, red	5.45@	5.75
Rose Water, gal.	6.50@	8.00
Rosin M. per cwt.	4.66@	
Salicylic Acid	.35@	.40
Saponin	2.00@	2.50
Silicate, 40°, drums, works, 100 pounds	.80@	1.20
Soap, neutral, white	.20@	.25
Sodium Carb. 58% light, 100 pounds	1.35@	2.35
Hydroxide, 76% solid, 100 pounds	2.60@	3.75
Spermaceti	.26@	.27
Stearate Zinc	.30@	.31
Styrax	1.60@	1.75
Tartaric Acid	.64	Nom'l
Tragacanth, No. 1	4.25@	4.50
Triethanolamine	.34½	Nom'l
Violet Flowers	1.75@	2.00
Zinc Oxide, U. S. P. bbls.	.10½@	.10¾

OILS AND FATS

Castor No. 1, tanks	.13@	
Cocoanut, Manila Grade, c.i.f., tanks	.0835@	
Corn, crude, Midwest, mill, tanks	.12¾@	
Corn Oil, distilled, bbls.	.15½	Nom'l
Cotton, crude, Southeast, tanks	.12¾@	
Grease, white	.08⅞@	
Lard	.1380@	
Lard Oil, common, No. 1 bbls.	.14@	
Palm, Niger, drums	.08¼@	
Peanut, refined, barrels	.16½	Nom'l
Red Oil, distilled, tanks	.12½@	
Stearic Acid Triple Pressed	.18⅝@	.19⅝
Double Pressed	.15⅞@	.16⅞
Tallow, acidless, barrels	.14¼@	
Tallow, N. Y. C., extra	.08⅝@	
Whale oil, refined	.1232@	

PLYMOUTH WAXES *For* CREAMS

This Spermaceti should not be confused with inferior hydrogenated sperm oils which are sometimes offered as Spermaceti The Plymouth Brand is the finest which can be produced and is produced from Genuine Sperm Oil by the cold pressing method. It is a very white crystalline wax containing no free oil, has a very low Iodine number and is free of any offensive odors.

PLYMOUTH Ozokerites

We offer two grades One is the highest quality obtainable, 76°-78° C melting point and the other grade lower in price and of lower melting point 66°-68° C. Both are guaranteed 100% Pure Bleached Ozokerites.

PLYMOUTH Sun-bleached White Beeswax U. S. P.

This is guaranteed to be a 100% Pure Beeswax and sun-bleached It is refined by the centrifugal method which removes all and every trace of foreign matter We will gladly send samples.

PLYMOUTH White Cirine Wax

A special grade of White Ceresin Wax prepared for the cosmetic trade Absolutely white and odorless. It has a melting point corresponding to that of Beeswax so that in using it in connection with Beeswax in cream any "lumpiness" is avoided. Its use will also produce a very glossy cream.

We offer all grades of the U S P fully-refined Paraffin Waxes.

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